



Faculty of Tropical
AgriSciences



MCYR
MULTIDISCIPLINARY CONFERENCE
FOR YOUNG RESEARCHERS

Conference Program

4th International Multidisciplinary Conference for Young Researchers

"Energy, Sustainability & Society"

5th-6th October 2023



Thursday, 5.10.2023

8:00 - 9:00	Registration and Check-In (<u>Atrium</u>)
9:00 - 10:30	Opening Ceremony & Keynote speeches (<u>Room 116</u>) <i>Unlocking Success: Navigating the Path of an Early Career Researcher</i> <i>Publication Bias in Scientific Findings – the case of Prunus persica</i> <i>The Rise of Chatbots and Their Impact on Society</i>
10:30 - 11:30	Coffee Break (<u>Bistro</u>)
11:30 - 12:30	Session 1: Exploring Sustainable Development and Economics
12:30 - 13:30	Lunch Break (<u>Bistro</u>)
13:30 - 17:30	Session 2: Waste to Energy: Opportunities and Challenges, Environmental Sciences, Medicine and Veterinary medicine, Agrobiology
18:00	Dinner (<u>Bistro and Atrium</u>)

Friday, 6.10.2023

9:00 - 10:30	Session 3: In-Person Poster Presentations (<u>Atrium</u>)
10:30 - 11:30	Coffee Break (<u>Bistro</u>)
11:30 - 12:30	Session 4: Online Poster Presentations
12:30 - 13:30	Lunch Break (<u>Bistro</u>)
13:30 - 16:30	Session 5: Advancements in Agriculture Engineering, Food security: Challenges to come, Ukraine - Current challenges and opportunities

Session 1: Exploring Sustainable Development and Economics

Room 1 401	Development of methodology for comparison of manure and biogas plants digestate for fishpond fertilising	Jan Staš, Miloslav Petrtýl, Hynek Roubík
	Influence of Chitosan and Glycerol-Sorbitol Concentrations on Physical Properties of Palm Oil Empty Fruit Bunches-Based Bioplastics	Ellyas Alga Nainggolan, Dedy Anwar, Maria Natassija Sariati, Meiyer Marthen Kinda, Klára Urbanová
	Assessment and implementation of Agriculture and Life Science Universities' first Gender Equality Plans in widening countries (AGRIGEP)	Jana Mazancová, Michal Lošťák, Tereza Žáková
Eduardo	Ugly Shade of Manual Scavengers in India: Insides and Recommendation	Rupak Kumar, Anuradha Saha 
Room 2 313	Studying the economic feasibility of growing barley and using it as green fodder for animals	Ghaith Amin Ali, E. Sliman Nedal Moualla 
	Intrinsic Drivers of Agricultural Land Abandonment: A case study of Nigeria	Oluwaseyi Olasoji, Miroslava Bavorova
Chama	Grid parity economic assessment of decentralized solar PV generation: Nigeria as a case study	B.G Danshehu, N. H Umar, H. M Maikafi, A Modibbo, Birinchi Bora

Session 2: Waste to Energy: Opportunities and Challenges, Environmental Sciences, Medicine and Veterinary medicine, Agrobiology

Room 1 401	Contribution of biogas technology to Global South nations attainment of sustainable development and circular economy: a bibliometric analysis	Tewodros Tarekegn Lapiso, Hynek Roubik
	Invasive common reed as a prospective bioenergy feedstock	Nariman Tanyrbergenov, Kseniia Paramonova, Olzhas Talipov, Tatiana Alexiou Ivanova, Talgat Zhakupov
	Technological Readiness and User Acceptance of Koko Bioethanol Cookstoves in Nairobi City County, Kenya.	Gerald Tagoe
	Farmers' knowledge and use of bioslurry for soil health: A case of the Kenya highlands	Esther Mwende Muindi, Andrew Wekesa Wamukota, Paterson Njeru, Stephen Kimani, Kevin Kinusu, Hynek Roubík
	Effect of phosphogypsum addition on anaerobic digestion process	Viktoriia Chubur, Yelizaveta Chernysh, Hynek Roubík
	The optimal mixing ratio of cow manure with food waste using a laboratory UASB reactor	Kinda Ali, Read Jafer, Adel Awad, Hussam Saboh 
	The effectiveness of pollutant removal in biogas effluent using a biofilter in Anaerobic Baffled Reactor (ABR) as liquid organic fertilizer	Lydia Mawar Ningsih, Udin Hasanudin, Hynek Roubík 
	Towards harmonization of biogas technology: a systematic review of key parameters to identify research extent and standardization.	Antoine Bercy, Hynek Roubik
	Comparison of conventional anaerobic digestion methods and the UASB reactor	Kinda Ali, Read Jafer, Adel Awad, Hussam Saboh 
Eduardo	Determinants of Biogas Technology Adoption in West Java, Indonesia	Ricardo Situmeang, Jana Mazancová, Hynek Roubík
	Financial and legislative aspects of biogas development in Poland and Ukraine	Dmytro Hopkalo, Iryna Vaskina, Jacek Dach, Roman Vaskin, Oleh Boiko 

Room 2 313	The Potential of Green Ammonia Production From Animal Waste in EU and Ukraine	S A Zhadan, Ye B Shapovalov, A I Salyuk, O M Zhadan	
	Rural development of Guimaras Island, Philippines: How climate change threatens local mango-driven development?	Tadeáš Hrušovský, Tomáš Lošák, Rhea Joy D. Flora	
	Adsorption of methylene blue and malachite green from the binary component system on the biochar derived from solid biogas digestate	Van Hau Duong, Nguyen Xuan Phuong, Phan Thi Duy Thuan, Dinh Van Dung, Le Dinh Phung, Dinh Quang Khieu, Hynek Roubík	
	Perception of water pollution and environmental risks in direct administered municipalities of China	Veronika Vaseková	
	Composting: an effective municipal sewage sludge treatment method in aerobic conditions	Thi Cam Tu Le, Katarzyna Bernat, Dorota Kulikowska	
	Analysis of EIA outcomes for constructions of road transport infrastructure	Petra Dvořáková, Tereza Hanušová, Zdeněk Kekena	
	From waste to feed raw material: utilising freshwater <i>Cladophora glomerata</i> macroalgal biomass in rabbit diets for the assurance of their physiological status	Monika Nutautaitė, Asta Racevičiūtė-Stupelienė, Vilma Vilienė	
	Intestinal immune response of rainbow trout (<i>Oncorhynchus mykiss</i>) supplemented with probiotic-based diet after <i>Aeromonas salmonicida</i> infection	Natália Chomová, Marek Ratvaj, Ivana Cingelová Maruščáková, Peter Popelka, Jana Koščová, Miroslava Palíková, Jan Mareš, Rudolf Žitňan, Martin Faldyna, Dagmar Mudroňová	
Chama	Effect of Tau pathology on Mitochondria	Muhammad Khalid Muhammadi, Tomas Smolek, Neha Basheer, Norbert Zilaka	
Room 3 315	Sowing quality of rapeseed depending on treatment with electromagnetic radiation of different modes as an environmentally way of increase yield	Oksana Pankova, Sergii Kharchenko, Kirill Sirovitskii	
	Synthetic polyploid induction improves essential oil yield and other agronomical traits in <i>Melissa Officinalis</i> L.	Rohit Bharati, Aayushi Gupta, Pavel Novy, Eloy Fernández-Cusimamani	
	Integrative meta-analysis of Soybean transcriptome responses to biotic stresses	Zahra Soltani, Ali Moghadam, Marzieh Mohri	
	Moisture accumulation in typical chernozem under soil protection farming system	Yurii Dehtiarov, Zinaida Dehtiarova	
	Use of electrophysical indicators during growing strawberries on drip irrigation	Yurii Dehtiarov	
	Influence of fertilizer products on yield and quality of corn grain	Elina Zakharchenko, Oksana Datsko, Yurii Mishchenko, Serhii Butenko	
	Weed control for corn in organic farming	Yurii Mishchenko, Elina Zakharchenko, Oksana Datsko, Volodymyr Ilchenko	
	Influence of cover crops on soil agrochemical properties	Roman Yaroshchuk, Elina Zakharchenko, Svitlana Yaroshchuk, Bogdan Nagorniak, Mykola Kravchuk	
Stacy	Conflict and rurality as determinants of food security: Evidence from the Kurdistan Region of Iraq	Niga Abdalla, Miroslava Bavorová, Ayat Ulla	

Session 3: In-Person Poster Presentations

Room 1 Atrium	Ethnobotanical uses and production constraints of Drumstick tree (<i>Moringa oleifera</i> Engl., Moringaceae) in Kilifi County, Kenya	Boniface Mwami, Zbynek Polesny, Prasad Henry, Alice Muchungi
	Effect of diurnal solar radiation regime and tree density on sap flow of Norway spruce (<i>Picea abies</i> [L.] Karst.) in fragmented stands	Vivek Vikram Singh, Khodabakhsh Zabihi, Aleksei Trubin, Rastislav Jakuš, Pavel Cudlín, Nataliya Korolyova, Miroslav Blaženec
	Digitalization and Environmental Concerns: How the Internet Affects Data Processing in Environmental Studies	Krystyna Sumtsova, Yelizaveta Chernysh, Hynek Roubík
	Human-wildlife conflict in forest arm interface of Guraferda and Arsi negele, District's, Ethiopia	Melese Merewa Reta
	In vitro biodegradation of zearalenone by the cell-free supernatants of <i>Lactobacillus</i> spp. and <i>Bacillus subtilis</i>	Michaela Harčárová, Eva Čonková, Pavel Naď
	Mimicking the porcine intestine: establishing an in vivo-like model	Zuzana Kiššová, Ludmila Tkáčiková, Dagmar Mudroňová, Róbert Link
	SARS-CoV-2 inhibiting antibodies were discovered in the sera of one leopard and two rhinoceros during serosurveillance on Dvůr Králové Zoo animals	Jignesh Italiya, Petra Straková, Lukáš Pavlačík, Jiří Váhala, Jaroslav Haimy Hyjánek, Jiří Salát, Daniel Růžek, Dominika Komárková, Jiří Černý
Yelizaveta	Ticks, its hosts and pathogens located in urban and peri-urban areas in Slovakia: new hazards for public health.	Cellengová Z., Vargová B., Peško B.
Room 1 Atrium	Genome-wide identification of the microbial opsin protein in <i>Leptosphaeria maculans</i> and <i>Fusarium oxysporum</i>	Marzieh Mohri, Ali Moghadam, Lenka Burketova, Pavel Ryšánek
	Integrative meta-analysis of <i>Brassica napus</i> transcriptome infected by <i>Leptosphaeria maculans</i>	Marzieh Mohri, Ali Moghadam, Lenka Burketova, Pavel Ryšánek
	Agricultural production in the functional urban area of Győr (Hungary)	Andrea Pozsgai, Tamás Hardi
	Sustainable Approach to Reduce Negative Impact of Emission from Open-Burning Crop Residue on the Environment	Hidayatul Fitri, Hynek Roubík
	Organisational mechanism for providing social support for projects on the use of biogas	Mariia Popova, Yelizaveta Chernysh, Hynek Roubík
	The resilient nature of yacon: Opportunities for its biomass for potential energy production, a systematic review	Okafor Uche Cyprian, Iva Viehmannova
	Sustainable solution of soil remediation for Ukraine's postwar reconstruction under bioenergy production	Yelizaveta Chernysh, Volodymyr Havryliuk
Yelizaveta	Analysis of the consequences of the impact of military actions on environmental components	Olena Hanoshenko, Marion Huber-Humer, Mykola Halaktionov

Session 4: Online Poster Presentations

Room 1 401	Conversion of biogas CO ₂ into environmentally friendly motor fuels	Viktoriia Ribun, Sergii Boichenko	
	The biochar effect on miscanthus biomass quality as biofeedstock	Iryna Klimkina, Serhii Krasovskiy, Mykola Kharytonov, Iryna Rula, Nadia Martynova	
	Modelling scenarios of agricultural production development on the basis of sustainable development with the use of biogas technologies	Sergii Kudria, Yurii Tarariko, Nadiia Kudria, Yelizaveta Chernysh, Viktoriia Chubur, Hynek Roubík	
	Comparative evaluation of the different inoculation techniques for effective food waste composting	Ester Kovaříková, Martina Vršanská, Stanislava Voběrková	
	Utilisation of lignocellulosic biomass from tomato production for energy purposes	Kamil Witaszek, Marcin Herkowiak, Yelizaveta Chernysh, Viktoriia Chubur, Hynek Roubík	
	Novel Applications of <i>Sida hermaphrodita</i> (L.) Rusby using In Vitro Culture Systems	Šarlota Kaňuková, Marcela Gubišová, Ján Kraic	
	Impact of <i>Trichoderma viride</i> against <i>Meloidogyne incognita</i> on ginger by analyzing its photosynthetic pigments and sugar content	Manaswini Mahapatra, Sumanta Das, Jyoti Prakash Sahoo, Rupak Jena	
	Classification of Plant Electrical Signals for Early Detection of Viral Diseases	Elham GHasemi, Esmail Ebrahimie, Ali Niazi	
	The co-expression analysis of soybean transcriptome to the identification of key drought stress-responsive genes	Fatemeh Mahmoodi Khaledabadi, Ali Moghadam, Marzieh Mohri, Ali Niazi	
	Powdery mildew species diversity on the Asteraceae family in the Czech Republic	Markéta Michutová, Mária Neoralová, Ivana Šafránková	
	Reflection of ecology and sustainability themes in contemporary radio plays produced by Radio and Television of Slovakia	Zuzana Belková	
	Comparative Eco-Footprints of Solar EVs vs. ICE Vehicles in 2023 Central Europe	Endre Hamerlik	
	Jan	Comparative analysis of different types of mixing nodes in terms of efficiency, productivity, and ecology.	Holovchenko Valentyn, Sumiatina Olha
Pre-sowing inoculation system and its associated expenses		Zubko Vladyslav, Zhyhylii Dmytro, Shelest Mykola	
Room 2 315	Psychological aspects of management enterprises in Spain and Ukraine	Leonid Taraniuk, Karina Taraniuk, Anastasiia Karepina	
	Development and simulation of on-farm activities non-linear optimized programming model for small-scale (A1) farms of Zvimba district	Welcome Zimuto, Tomas Ratinger	
	Study of the Correlation between Net International Investment Position and International Migration Balance	Larysa Hromozdova, Svitlana Usherenko, Oksana Vidomenko, Oleksii Demikhov, Yana Derbenova, Yulia Opanasiuk, Valentyna Orlenko	
	What really makes food-based entrepreneurs succeed: evidence from young entrepreneurs in Ghana.	Bernard Kwamena Cobbina Essel	
	Evaluation of the reliability of microscopic diagnosis of <i>Nosema</i> spp. by duplex PCR	Beáta Hurná, Monika Sučík, Petra Kandráčová, Martin Staroň, Štefan Tutka, Zuzana Maková, Alexandra Valenčáková	
	Typification of <i>Cryptosporidium muris</i> and <i>Cryptosporidium andersoni</i> using MLST analysis	Monika Sučík, Alexandra Valenčáková, Olga Danišová, Igor Valocký, Petra Kandráčová, Beáta Hurná	
	Biotope distribution of helminths of ungulates of Ukraine	Olexandra Boyko, Victor Brygadyrenko	
	The improved identification of ultrastructure of rumen ciliate using cryopreservation technique combined with the electronic microscopy	Svetlana Malyugina, Andrea Staffa	
	Prevalence of <i>Malassezia globosa</i> and <i>Malassezia restricta</i> on the healthy human skin	Zuzana Malinovská, Eva Čonková, Peter Váci	
	Civil Engineering inspection integrated with artificial intelligence and Fuzzy Logic, destined for residential properties appraisals	Vladimir Surgelas, Irina Arhipova, Vivita Puķīte	
	Experimental investigation of an innovative complex air cleaner efficiency	Vivian Achão Surgelas, Tadas Prasaukas, Vivian Surgelas	
	Marek	Perception, purchasing behaviour and determinants of local rice consumption among different income strata of Ghana.	Bernard Kwamena Cobbina Essel

Methodology for Detecting Depressive States in Adolescents During Wartime

Liliia Molhamova

Treatment of contaminated water during (Zaporizhzhia) Nuclear Power Plants operation by ion exchange

David Kovtun

Session 5: Advancements in Agriculture Engineering, Food security: Challenges to come, Ukraine - Current challenges and opportunities

Room 1 401	Enhancing Selective Coffee Harvesting in Challenging Terrains: A Modal Analysis and Vibration-Based Approach	Eduardo Duque-Dussán, Jan Banout	
	Moisture Management in Solar Drying of Coffee: Comparing Different Methods to Prevent Remoisturizing	Paula A. Figueroa-Varela, Eduardo Duque-Dussán	
	Application perspective of water extract from honeysuckle leaves and its effect on the quality of fresh chicken meat	Naijuan Nan, Tetiana Stepanova, Bo Li	
	Gender-specific Vulnerability on Climate Change and Food Security Status - A catchment approach on agroforestry systems - a multi-country case study	Zerihun Yohannes Amare	
	How remote sensing can help through the prediction and mapping of toxic elements in the soil environment?	Vahid Khosravi, Asa Gholizadeh, Mohammadmehdi Saberioon	
Room 2 315	Metataxonomic studies of phosphogypsum as a substrate for bioprocesses: a review	Yelizaveta Chernysh	
	The war in Ukraine, a famine in the making	Adam Hruška	
	Ukraine as a food supplier and guarantor of food security: pre-war and wartime realities	Larysa Satyr, Ruslana Zadorozhna, Valentyna Kepko, Leonid Stadnik	
	Ways of optimizing state regulation of the agricultural sector in war conditions	Bohdan Osypenko	
	Ukrainian village through the prism of modernity (on the example of Kharkiv region)	Anastasiia Lapchenko	
	Assessment of Ammonia Production Potential from Animal Wastes in Ukraine: A Promising Approach for Sustainable Resource Management	S A Zhadan, Ye B Shapovalov, A I Salyuk, O M Zhadan	
	EU practices for sustainable economy implementation	Olena Kasian	
	Overview of sunflower cultivation areas in Ukraine in the period from 2021 to 2023	Andrii Kysylchuk, Elina Zakharchenko, Yehor Bolshakov	
Yelizaveta			