

Biosystems Engineering 2021, SCHEDULE

Day	Time				
		<u>BIOSYSTEMS ENGINEERING 2021</u>			
Wednesday 05.05.2021	10.00 – 10.15	Opening Statement. Prof. Mait Klaassen , Rector of Estonian University of Life Sciences Opening remarks and practical information. Margus Arak , Director of Institute of Technology of Estonian University of Life Sciences			
		<u>PLENARY SESSION</u> Chairman Margus Arak			
	10.15 – 10.45	Lessons learnt from long-term field crop experiments – Prof. Evelin Loit , assistant professor in crop production and genetics at the Estonian University of Life Sciences.			
	10.45 – 11.15	Trends in food science and technology – Prof. Ivi Jõudu , Head of Chair of Food Science and Technology at Institute of Veterinary Medicine and Animal Science of Estonian University of Life Sciences (EMU).			
	11.15 – 11.45	Modelling of cutting data and how it may be used in technology planning – Dr. Daniel Johansson , Seco Tools AB, Sweden			
	11.45 – 12.15	Internal Combustion Engine Development Trends in the Age of Electrification – Prof. Marcis Jansons , Associate Professor of the Mechanical Engineering Department at Wayne State University in Detroit, Michigan, Professor at the Estonian University of Life Sciences.			
		<u>PHOTO SESSION</u> Please turn on your computer cameras. We will make some screenshots!			
	12.30 – 16.15	<u>BIOENERGY</u> Chair: Prof. Timo Kikas	<u>RENEWABLE ENERGY & ERGONOMICS</u> Chair: Dr. Alo Allik, Prof. Eda Merisalu	<u>FOOD TECHNOLOGY</u> Chair: Prof. Ivi Jõudu	<u>AGRICULTURAL ECONOMICS</u> Chair: Dr. Ants-Hannes Viira
	12:30	Development of the Digital Matchmaking Platform for bi-directional partnership in biogas sector – Vitalijs Komasilovs, Armands Kviesis, Nikolajs Bumanis and Aleksejs Zacepins : Latvia	An Overview of Measurement Standards for Power Quality – Noman Shabir : Estonia	A digital learning tool based on models and simulators for food engineering (MESTRAL) – Guy Della Valle : France	The Role of Producer Organizations in Development of the Latvian Fruit and Vegetables Sector and the EU – Inese Biuksane
	12:50	Laboratory analyses for assessing the potential for biogas production of various agricultural residues of Greece – Vasiliki Aravani , Konstantina Tsigkou, Michael Kornaros and Vagelis Papadakis: Greece	Distribution Grid Stability – Influence of Synchronous Machines – Tomáš Petrík : Czech Republic	Experimental study of thermal performance of different fruit packaging box designs – Fábio Leitão, Pedro D. Silva, Pedro D. Gaspar , Ana Gonçalves and Diana Duarte: Portugal	Artificial Intelligence Use for Agri-Circular Economy: An Analysis of Possible Areas of Application, Potential Benefits and Challenges – Israel Dunmade
	13:10	Investigation of changes in biogas quality and digestate composition using manure and fat – Egidijus Buivydas , Kestutis Venslauskas, Kestutis Navickas, Bronius Zalys, Vidmantas Zuperka and Mantas Rubezius: Lithuania	Operation of the Photovoltaic System in Prague and Data Evaluation – Jana Šafránková : Czech Republic	CFD modelling of the thermal performance of fruit packaging boxes – Influence of vent-holes design – Adhiyaman Ilangovan , João Curto, Pedro D. Gaspar and Pedro D. Silva: Portugal	Marginal Abatement Cost Curve for an Ammonia Reduction Measure in Agriculture: the Case of Latvia – Arnis Lenerts , Dina Popluga, Kaspars Naglis-Liepa, Dzidra Kreismane, Elita Aplocina, Laima Berzina and Olga Orlova

	13:30	Effect of hydrothermal carbonization and torrefaction on spent coffee grounds – Ekaterina Sermyagina , Ivan Deviatkin and Clara Mendoza: Finland	Community and Shared Solar Power Option: A Pathway to Sustainable Rural Electrification in Nigeria – Israel Dunmade : Canada	Retort temperature distribution and heat penetration studies comparison between glass jars and retort pouches – Evalds Raits , Lasma Pinte, Asnate Kirse-Ozolina and Sandra Muizniece-Brasava: Latvia	Consumer Approach to Contemporary Dairy Production Problems: A Case Study on the Generation of Young Polish People – Marek Gaworski , Piotr Borowski and Marzena Zajkowska
	13:50	Analysis of characteristics of solid biomass fuel used for energy production – Nerijus Pedišius, Marius Praspaliauskas , Justinas Pedišius and Eugenija Farida Dzenajavičienė: Lithuania	Solar Electric Bicycle Development and Research – Dainis Berjoza : Latvia	<i>Coffee break</i>	Evaluation of Bioresource Validation – Nidhiben Patel , Lauma Zihare and Dagnija Blumberga
	14:10	CARBON BALANCE OF BIOGAS PRODUCTION FROM MAIZE IN LATVIAN CONDITIONS – Agita Gancone, Ketija Bumbiere, Jelena Pubule and Dagnija Blumberga: Latvia	Heat Storage Energy Balance and Optimization of Insulation – Mart Hovi : Estonia	Composition and characterization of hot-pressed rapeseed cake for the purpose of bioplastic production – Katrin Jõgi , Dunja Malenica, Ivi Jõudu and Rajeev Bhat: Estonia	Economic Comparison of Cultivation of Different Legume Species in the Organic Farming System – Livija Zarina , Dace Piliksere, Liga Zarina and Sallija Cerina
	14:30	Hydrothermal carbonization of chemical and biological pulp mill sludges – Jordan Banks, Clara Mendoza Martinez , Ekaterina Sermyagina and Esa Vakkilainen: Finland	<i>Coffee break</i>	Obtaining lipids from herring family fish processing wastes fermented during salting and development of dietary supplements based on them – E. Kuprina, V. Filipov, A. Manuilov , A. Yakkola, V. Abramzon, M. Kremenevskaya, M. Zashikhin, A. Kuznetsova, A. Kopylov and A. Maksimenkov: Russia	Modeling Multiplier Effect of Local Food System – Kaspars Naglis-Liepa , Liga Paula, Kaufmane Dace and Līga Proskina
	14:50	Implications of Fungal Biomass Production from Sidestreams on the Economy of First Generation Ethanol Plants – Gülru Bulkan , Jorge A. Ferreira, Mohammad J. Taherzadeh and Karthik Rajendran: Sweden	Development of farm safety culture in Finland - Jarkko Leppälä : Finland	Extraction, identification and quantification of valuable products from soy molasses – Grigory Slesarev , Elena Kovaleva and Vadim Shevyrin: Russia	Prospects of Wood Pellet Production and Business Model Innovation in Kazakhstan - A Case Study – Timur Kogabayev , Anne Pöder
	15:10	Life cycle inventory of processing 1 tonne of oil palm fresh fruit bunch – Kelechi Anyaoha and Lulu Zhang: Germany	Promoting Farmer occupational safety and health (OSH) services through Extension - John McNamara : Ireland	Influence of incorporation whey protein Isolate on the physicochemical, rheological and microstructural properties of non-fat yoghurt – Mahmood Hashim , Elena Bendenko, Anastasia Pavlova and Liudmila Nadtochii: Russia	Application of Cluster Analysis in Business Model Development – Jüri Lillemets
	15:30	Production of xylitol on undetoxified corn cob hydrolysates by <i>Pachysolen tannophilus</i> and <i>Pichia kudriavzevii</i> – O. Jolayemi, M. Oke, L. Rocha-Meneses and P. F.Omojasola: Canada	Trends on work accidents in agriculture in EU countries - Eda Merisalu : Estonia	Effect of the Lactation Months on Milk Composition of the Second-Parity Lacaune Ewes Vilma Tatar : Estonia	

	15:50		Farmers opinions on work environment and injury risks in Estonia - Anni Enn : Eesti		
	16:10		Indoor air quality of basement floor working rooms including radon concentration measurements - Aksel Mõttus : Estonia		
		PHOTO SESSION Please turn ON your computer cameras. We will make some screenshots!			
	12.30 – 16.15	ENGINEERING Chair: Prof. Marcis Jansons	PRECISION AGRICULTURE Chair: Prof. Endla Reintam	AGRICULTURAL & LIVESTOCK ENGINEERING Chair: Prof. Marek Gaworski	
	12:30	Air-Fuel Mixture Processing System for a Spark Ignition Engine – Veljo Raide , Estonia	Potential of Multivariate analyses of X-Ray fluorescence spectra for characterisation of the microchemical composition of plant materials – Agnese Brangule , Māris Bērtiņš, Artūrs Vīksna and Dace Bandere	Influences of soil tillage, fertilization and plant density on maize yield – Laszlo Duzs, Peter Ragan, Eva Horvath, Adrienn Szeles, Janos Nagy and Tamas Ratonyi: Hungary	
	12:50	Concept of the Membrane Engine – Roland Allmägi , Estonia	Development of an algorithm for canopy measurements with terrestrial LiDAR to implement precision spraying in vineyards – Andrea Pagliai , Daniele Sarri, Riccardo Lisci, Stefania Lombardo, Marco Vieri, Carolina Perna, Guido Cencini and Gabriel Araújo E Silva Ferraz	Passive cooling of electronics in plywood enclosure for agricultural robot prototype – Janis Galins, Vitalijs Osadcuks and Aldis Pecka: Latvia	
	13:10	Effects of storage on the properties of rapeseed oil and alcohol blends – Carolin Nuortila	Effectiveness of new biopesticides in diseases control of organic potatoes – Vladislav Minin , Irina Novikova, Julia Titova, Irina Krasnobaeva, Anton Zakharov and Alexander Perekopskiy	Scaling analysis of the charring cycle of the thermal energy storage system with a low prandtl number PCM in a square cavity – Jaykishan Chamundia and Ojas Satbhai: India	
	13:30	Operational parameters of diesel engine running on diesel fuel– rapeseed oil–methanol–iso-butanol fuel blends – Jakub Čedík	Leaf blotch development depending on fungicide treatment scheme under different nitrogen levels – Agrita Švarta , Gunita Bimšteine and Jānis Kaņeps	Influence of blade condition on tillage erosion – Pavel Brož, Petr Novák and Josef Hula: Czech Republic	
	13:50	Uses of peat as a raw material for value-added products – a brief review – Vjaceslavs Lapkovskis	Influence of soil tillage, fertilization and plant density on maize yield – Laszlo Duzs , Peter Ragan, Eva Horvath, Adrienn Szeles, Janos Nagy and Tamas Ratonyi	Cultivation technology for low-bush blueberry cultivation in milled peat field plantations – Margus Arak: Estonia	

	14:10	Effect of temperature on dynamic behavior of single wall carbon nanotube on elastic medium – Mohammed Mainul Hossain and Jaan Lellep	Analysis of Factors Influencing the Temperature of Strawberry Flowers in Night Frost Conditions – Veli Palge, Eugen Kokin and Madis Pennar	Granulometric parameters of fertilizers used in blueberry farming during vegetation period – Tormi Lillerand: Estonia	
	14:30	How environmental problems can be solved using highly porous powdered titanium – Ervins Blumbergs, Viktors Mironovs and Ekaterina Kuzmina	<i>Coffee break</i>	Suitability of volumetric dispenser in precision fertilization with granular fertilizers – Indrek Virro: Estonia	
	14:50	Comparison of physical composition of municipal solid waste in Czech municipalities and their potential in separation – Shuran Zhao, Vlastimil Altmann, Lenka Richterova and Viktorie Vitkova	A closer look at analyzing drought stress pot experiment spectrometric data using Bayesian statistics – Wiktor Żelazny	Reduction of ammonia emissions by applying probiotics on litter in a commercial breeding poultry house – Sabīne Eglīte: Latvia	
	15:10	A Novel Method for Extraction of Metallurgical Grade Silicon (MG-Si) from Rice Husk Ash using High Temperature Atmospheric Tube Furnace – Puja Priyadarshini Nayak and Ashis Kumar Datta	Comparative study of biostimulant properties of humic substances depending on their origin – Maris Klavins , Gederts Ievins and Santa Grandovska	Energy supply of mobile service station prototype for automated field robot – Soots, K., Jõgi, E., Lillerand, T., Virro, I., Olt, J. : Estonia	
	15:30		A Global Perspective of Herbicide-Resistant Weeds and Management Options – Meisam Zargar , Maryam Bayat		
	15:50		Interaction between guttation and yield for cereals grain crop – E. Nugis , J. Kuht and A Komarov		
	16:10		Phosphate solubilization potential of indigenous rhizosphere fungi and shelf-life studies of their biofertilizer formulations – D. A Balogun , M. Oke, L. Rocha-Meneses, O.B Fawole and P.F. Omojasola		
		PHOTO SESSION Please turn ON your computer cameras. We will make some screenshots!			
		POSTER SESSION			
FIRST ROOM		AGRICULTURAL ENGINEERING			
		Linear compression behaviour of oil palm empty fruit bunches - T.Saller, D.Herak, C.Mizera, A. Kabutey: Czech Republic			
		Phenotyping and Weed Detection with Multispectral Drone Imagery at the Estonian Crop Research Institute - HannahJoy Kennedy, Anti Konsap, Reine Koppel, and Kalvi Tamm: Estonia			

	<p>PRODUCT-ORIENTED PRODUCTION OF INDUSTRIAL HEMP ACCORDING TO CLIMATIC CONDITIONS - Ērika Teirumnieka, Dagnija Blumberga, Edmunds Teirumnieks, Veneranda Stramkale: Latvia</p> <p>Building performance analysis of a dairy factory in South Iraq: appraisal of a local bio-based envelope - S. Simonini, G. Rossi, V. Becciolini, S. Camiciottoli, L. Conti, P.F.P. Ferraz, G.A.S. Ferraz and M. Barbari: Italy, Brazil</p> <p>Influences of soil tillage, fertilization and plant density on maize yield - L. Duzs, P. Ragán, É. Horváth, A. Széles, J. Nagy and T. Rátonyi: Hungary</p> <p>EVALUATION OF PASSIVE COOLING SYSTEM IN PLYWOOD ENCLOSURE FOR AGRICULTURAL ROBOT PROTOTYPE - J.Galins, V.Osadcuks, A.Pecka: Latvia</p> <p>NATIONAL UNIVERSITY OF LIFE AND ENVIROMENTAL SCIENCES OF UKRAINE PLANT SCIENCE DEPARTMENT - Kalenska S., Novytska N., Stolyarchuk T., Kalenskyi V., Garbar L., Sadko M., Shutiy O. and Sonko R.: Ukraine</p> <p>NEW DEVICE FOR AIR DISINFECTION WITH A SHIELDED UV RADIATION AND OZONE - A. Martinovs , L. Mezule , R. Revalds , V. Pizica , V. Denisova , A. Skudra , G. Kolcs , E. Zaicevs and T. Juhna: Latvia</p> <p>Influence of blade condition on tillage erosion - Pavel Brož, Josef Hůla, Petr Novák: Czech Republic</p>
<u>FIRST ROOM</u>	<p><u>AGRICULTURAL ECONOMICS</u></p> <p>Marginal Abatement Cost Curve for an Ammonia Reduction Measure in Agriculture: the Case of Latvia - A. Lenerts, K. Naglis-Liepa, D. Popluga, Dz. Kreišmane, E. Aplociņa, L. Bērziņa and O. Frolova: Latvia</p> <p>Attitudes of a group of young Polish consumers towards selected features of dairy products - Marek Gaworski, Piotr F. Borowski, Marzena Zajkowska: Poland</p> <p>Evaluation of bioresources validation - Nidhiben Patel, Lauma Zihare, and Dagnija Blumberga: Latvia</p> <p>Gross margin comparison of cultivation of different legume species in the organic farming system - L. Zarina, L.Zarina, D.Piliksere and S.Cerina: Latvia</p> <p>ECONOMIC ASSESSMENT OF USE OF PULSES IN DIETS FOR CAPTIVE RED DEER - L. Proskina1, S. Cerina: Latvia</p> <p>Bioresource productivity evaluation in EU countries - A.Kubule, L.Zihare, I.Vamza, Z.Indzere, D.Blumberga: Latvia</p> <p>The Role of Producer Organizations in Development of the Latvian Fruit and Vegetables Sector and the EU - Inese Biukšāne: Latvia</p>
<u>FIRST ROOM</u>	<p><u>BIOENERGY AND BIOFUELS</u></p> <p>Use of principal component analysis to evaluate thermal properties and combustibility of coffee-pine wood briquettes approach – Clara L. Mendoza-Martinez, Ekaterina Sermiyagina, Marcia S. De Jesus & Esa vakkilainen: Finland, Brazil</p> <p>Recovering industrial wastes in (semi)-biocomposites – Galia Shulga, Brigita Neiberte, Jevgenijs Jaunslavietis, Anrijs Verovkins, Sanita Vitolina, Talrits Betkers, Latvia</p> <p>Packing materials for biotrickling filters used in biogas upgrading –biomethanation - Z. Kusnere, K. Spalvins, D. Blumberga, I. Veidenbergs, Latvia</p> <p>EFFECT OF INK REMOVAL ON BIOETHANOL YIELDS FROM WASTE BANKNOTE PAPER – Omid Yazdani Aghmashhadi, Ghasem Asadpour, Esmail Rasooly Garmaroody, Majid Zabihzadeh, Lisandra Rocha-Meneses and Timo Kikas: Iran, Estonia</p> <p>Protic Ionic Liquids (PILs) For Lignin Extraction – Isa Hasanov, Timo Kikas: Estonia</p> <p>Torrefaction of agricultural and wood waste: Comparative analysis of selected fuel characteristics – Margareta Novian Cahyani, Tharaka Rama Krishna C Doddapaneni, Marten Madissoo, Linner Pärn, Indrek Virro, Timo Kikas: Estonia</p>
<u>FIRST ROOM</u>	<p><u>ERGONOMICS AND ERGODESIGN</u></p> <p>Airborne mould community in the bedrooms of straw-bale and reed-bale residential houses - Jane Raamets, Aime Ruus, Mari Ivask, Lembit Nei, Karin Muoni: Estonian</p> <p>PROMOTING FARMER OCCUPATIONAL SAFETY AND HEALTH (OSH) THROUGH EXTENSION John McNamara, Marion Fox, Jim Kinsella, Deirdre O'Connor: Ireland</p>
<u>SECOND ROOM</u>	<p><u>FOOD SCIENCES AND TECHNOLOGY</u></p> <p>The Effect of bean flour Addition on the rheological Properties and Baking Quality of a triticale flour blends – M. Maradudin, I. Simakova and A. Fedonnikov: Russia</p> <p>Morphology of Camellia sinensis L. leaves as marker of white tea authenticity - N. Durnova, M. Simakova, D. Isaev, I. Simakov and A. Simakov: Russia</p>

	Rheological properties of hull-less barley spontaneous sourdough during the fermentation – Reidzane S., Galoburda R., Lācis G. and Klava D.: Latvia
	Evaluation of ozone influence on wheat grain quality during active drying - Straumite Evita, Rucins Adolfs, Viesturs Dainis, Kleperis Janis, Kristins Alberts: Latvia
	The shelf-life of liquid pancake dough, depending on the different types of packaging - V. Kocetkovs, S. Muizniece-Brasava: Latvia
	OBTENTION OF OMEGA-3 FATTY ACIDS CRYOCONCENTRATED FISH OIL FROM BY-PRODUCTS OF PRESERVES INDUSTRY - E. Kuprina, V. Filipov, A. Yakkola, A. Manuilov, V. Abramzon, M. Kremenevskaya, M. Zashikhin, A. Kuznetsova, A. Kopylov, A. Maksimenkov: Russia
	EVALUATION OF CARBON, NITROGEN AND OXYGEN ISOTOPE RATIO MEASUREMENT DATA FOR CHARACTERIZATION OF SPRING BARLEY (HORDEUM VULGAREL.) FROM DIFFERENT CROP MANAGEMENT SYSTEMS - Lauma Buša, Māris Bērtiņš, Arturs Vīksna, Linda Legzdīņa, Daniels Kobzarevs: Latvia
	A perspective of the Portuguese consumer awareness, beliefs and preferences towards piglet castration methods and its implications on the meat quality - Pereira Pinto, Ricardo and Vaz-Velho, Manuela: Portugal, Spain
	Measurability of quality in fermentation process of rice wine by IoT in the field of industry 4.0 - J. VOŠAHLÍK, J. Hart: Czech Republic
	Improving single cell protein yields and amino acid profile via mutagenesis: review of applicable amino acid inhibitors for mutant selection - K. Spalvins, S. Raita, K. Valters, D. Blumberga: Latvia
	Characterization of red raspberry (<i>Rubus idaeus</i> L.) for their physicochemical and morphological properties - Ingrīda Augšpole, Inta Romanova, Anda Liniņa, Fredijs Dimiņš: Latvia
	Antioxidants Characterization of the Fruit, Juice and Pomace of Sweet Rowanberry (<i>Sorbus aucuparia</i> L.) cultivars of Estonia - V. Sarv, P.R. Venskutonis, R. Bhat, R. Rätsep, M. Vinogradov, A. Kikas, K. Kahu: Estonia
	Production of xylitol on undetoxified corn cob hydrolysates by <i>Pachysolen</i> and <i>Pichia kudriavzevii</i> – Oluwabukunmi Jolayemi, Mushafau Oke, Lisandra Rocha-Meneses, Patricia Folakemi Omojasola: Nigeria, Canada, Estonia
<u>SECOND ROOM</u>	<u>LIVESTOCK ENGINEERING</u>
	Trend of cow herd size in Baltic states - Arvo Leola, Juris Priekulis, Jonas Čėsna, Marek Gaworski: Estonia, Latvia, Lithuania, Poland
	Analysis of environmental conditions and management in a compost-bedded pack barn with tunnel ventilation - B. Yameogo, R.R. Andrade, C.G.S. Teles Júnior, G.S. Laud, V. Becciolini, L. Leso, G. Rossi and M. Barbari: Italy, Brazil
	Behavioural patterns of cow housed in two different typologies of compost-bedded pack barns - Yameogo, R.R. Andrade, C.G.S. Teles Júnior, G.S. Laud, V. Becciolini, L. Leso, G. Rossi and M. Barbari: Italy, Brazil
	Nutritive characterization of Musasp and its effects on in vitro Rumen fermentation characteristics - S.M.P. Teixeira, C.S.A.M. Maduro Dias, C.F.M. Vouzela, J.S. Madruga and A.E.S. Borba: Portugal
	ECOLOGICAL FOOTPRINT OF BEEF CONSUMPTION IN THE STATE OF RIO DE JANEIRO – BRAZIL - J.B. Cunha, D. Cecchin, P.I.S. Amaral, F.C. Silva, A.R.G. Azevedo, I.L. Salcedo, C.M. Hüther, F.A. Sousa and D.F. Carmo: Brazil
	EFFECT OF REPLACEMENT OF COATED BARLEY GRAIN WITH HULLESS BARLEY IN DIET ON GROWTH, CARCASS AND MEAT QUALITY TRAITS OF FATTENING PIGS - L. Degola, I. Jansons, V. Šterna: Latvia
	Effect of dietary crude protein concentration on milk productivity traits in early lactation dairy cows - D. Ruska and D. Jonkus: Latvia
	GROWTH PERFORMANCE AND PRODUCTION OF GREENHOUSE GASES IN CALVES SUPPLEMENTED WITH PREBIOTIC INULIN OR A NOVEL SYNBIOTIC (INULIN AND YEAST) - Sintija Jonova, Agris Ilgāz, Aija Ilgāza, Linda Gatina, Maksims Zolovs: Latvia
	Reduction of ammonia emissions by applying probiotics on litter in a commercial breeding poultry house - S. Eglīte, A. Ilgāža: Latvia
	Comparative effect of different amount of inulin and synbiotic on growth performance and blood characteristics 12 weeks old calves A. ILGAZA, A. ARNE: Latvia
	Cultivation of single cell protein (<i>Methylophilus methylotrophus</i>) for the production of carbon-reducing animal feed - Lisandra Rocha-Meneses, Mushafau Oke, Michael Chae, David C. Bressler: Canada
<u>THIRD ROOM</u>	<u>PRECISION AGRICULTURE</u>

	Vertical orientation of wheat grain germination during the course of sowing - V.Zubko, V.Sirenko, T.Kuzina, V.Onychko, S.Sokolik, H.Roubik: Ukraine, Czech Republic
	Effect of fertilization on growth of lingonberry (<i>Vaccinium vitis-idaea</i> L.) - Andis Karlsons, Signe Tomsone, Madara Lazdāne, Anita Osvalde: Latvia
	Effect of carbon/nitrogen ratio and aeration on mineral content during olive pomace and turkey manure co-composting - R. Aboutayeb, S. Elmrini, A. Zouhri: Morocco
	The effect of cultivation technology on the plant development of organically grown garlic - Līga Lepse, Solvita Zeipiņa, Imants Missa, Anita Osvalde: Latvia
	The efficiency of nitrogen stabilizer at different soil temperatures on the maize (<i>Zea mays</i> L.) health condition - Dalma RÁCZ, Barnabás GILA, Éva HORVÁTH, Árpád ILLÉS, Adrienn SZÉLES: Hungary
	DELINEATION OF CATCHMENT AREA FOR THE LAKE KISEZERS FOR ENVIRONMENTAL SUSTAINABILITY - J. Dumpis, A. Lagzdins, I. Sics: Latvia
	Elemental content of fababeans affected by rhizobia and mycorrhiza fungi - A. Klūga, M. Bērtiņš, L. Dubova, I. Alsina and A. Vīksna: Latvia
	Leaf nutrient status of tomatoes in coconut coir medium – differences in cultivars, impact on yield and quality - A. Osvalde, A. Karlsons, G. Cekstere: Latvia
	The ecological adaptation of new spring canola varieties in different environmental conditions - L. Prysiashniuk, O. Topchii, Z. Kyienko, S. Tkachyk, S. Melnyk: Ukraine
	Hybridspecific nutrient interactions and their role in maize yield quality - CsabaBojtor, ÁrpádIllés, ÉvaHorváth, JánosNagy and Csaba L.Marton: Hungary
	INFLUENCE OF TILLAGE INTENSITY ON SPATIAL VARIABILITY OF SOIL WATER CONTENT - U. Pečan, M. Pintar, R. Mihelič, D. Kastelec: Slovenia
	Possibilities of cucumber powdery mildew detection by hyperspectral Imaging - Ina Alsina, Gunita Bimsteine, Laila Dubova, Jānis Kaņeps, Kristis Kviesis, Biruta Bankina, Mara Duma, Ansis Avotins: Latvia
	Digestate application with regard to greenhouse gases and physical soil properties - P. Šařec, J. Korba, V. Novák, K. Křížová: Czech Republic
	EVALUATION OF MULTI-FREQUENCY ELECTRICAL CONDUCTIVITY MEASUREMENTS TO DETERMINE THE SOIL NUTRIENT CATION CONCENTRATION - J. Horváth, I. Szabó, L. Kátai: Hungary
	A Global Perspective of Herbicide-Resistant Weeds and Management Options - Meisam Zargar, Maryam Bayatand Elena Pakina: Russia
	Examination of the stress state of maize by means of stomatal conductance measurement - É. Horváth, D.RácZ,L. Dúzs, Cs. Bojtor, A. Széles: Hungary
<u>THIRD ROOM</u>	<u>NANOMATERIALS AND NANOCOMOSITES</u>
	ENVIRONMENTAL PROBLEMS CAN BE SOLVED USING HIGHLY POROUS POWDERED TITANIUM - V. Mironovs, E. Kuzmina, E. Blumbergs: Latvia
	STUDY OF THE DEGREE OF CADMIUM REDUCTION FROM CADMIUM OXIDE BY THE ELECTROSLAG METHOD UNDER DIFFERENT CONDITION - E. Blumbergs, J. Freibergs, E. Platacis, M. Maiorov, V. Serga: Latvia
<u>THIRD ROOM</u>	<u>PRODUCTION ENGINEERING</u>
	APPLICATION OF PINEAPPLE FIBER IN THE DEVELOPMENT OF SUSTAINABLE MORTARS - Afonso Rangel Garcez de Azevedo, Higor Azevedo Rocha, Markssuel Teixeira Marvila, Daiane Cecchin, Gustavo de Castro Xavier, Rodrigo Cimas da Silva, Patrícia Ferreira Ponciano Ferraz, Leonardo Conti and Giuseppe Rossi: Brazil, Italy
	INFLUENCE OF DIFFERENT METHODS OF TREATING NATURAL AÇAÍ FIBER FOR MORTAR IN RURAL CONSTRUCTION - D.L. Rocha, A.R.G. Azevedo, M.T. Marvila, D. Cecchin, J. Alexandre, D.F. Carmo, P.F.P. Ferraz, L. Conti and G. Rossi: Brazil, Italy
	INFLUENCE OF THE INCORPORATION OF ETHYLENE POLYTEREFTALATE IN THE MECHANICAL PROPERTIES OF SOIL-CEMENT BRICKS - T. R. Silva, D. Cecchin, A.R.G. Azevedo, I. C. R. P. Valadão, F. C. da Silva, J. Alexandre, M.T. Marvila, F.C. Da Silva, P.F.P Ferraz, D.F. do Carmo, G. Rossi, L. Conti: Brazil, Italy
	Development of 3D printing raw materials from plastic waste ;case of Recycled Polyethylene Terephthalate - A. Oussai, L. Katai, Z. Bartfai: Hungary
<u>THIRD ROOM</u>	<u>VEHICLES AND FUELS</u>
	Waste fish oil as an alternative renewable fuel for IC engines - M. Hissa, S. Niemi, T. Ovaska and A. Niemi: Finland
	Storage stability of rapeseed methyl ester stored in a sealed barrel for seven years - S. Heikkilä, K. Sirviö, C. Nuortila and S. Niemi: Finland

	Productive efficiency and density and viscosity studies of biodiesels from vegetable oil mixtures - R. C. B. Correia, F. C. Silva, M. M. Barros, A. C. L. Maria, D. Cecchin, L. A. Souza, D. F. Carmo: Brazil
	Prospect on agro-industrial residues usage for biobutanol production - S. Raita, K. Spalvins, D. Blumberga: Latvia
<u>THIRD ROOM</u>	<u>WASTE RECOVERY</u>
	Production of CO ₂ concentrations in different ways of biowaste treatment - I. Karandušovská, P. Hlinka, Š. Mihina, D. Pálež and T. Szabóová: Slovakia
	Comparison of municipalities of the Czech Republic in physical composition of municipal solid waste and their potential in separation - Shuran Zhao; Lenka Richterova; Vlastimil Altmann, Viktorie Vitkova : Czech Republic
	BIBLIOMETRIC ANALYSIS ON THE USE OF NATURAL FIBERS IN CONSTRUCTION MATERIALS - G.M.G. Ferreira, D. Cecchin, A.R.G. Azevedo, I.C.R.P. Valadão, K.A. Costa, P.I.S. Amaral, F.A. Sousa, C.M. Hüther and J.O. Castro: Brazil