



VYTAUTAS MAGNUS
UNIVERSITY
AGRICULTURE
ACADEMY



9th International Scientific Conference

RURAL DEVELOPMENT 2019

RESEARCH AND INNOVATION FOR BIOECONOMY

26-28 September 2019, Vytautas Magnus University Agriculture Academy, Lithuania

The 9th International Scientific Conference

RURAL DEVELOPMENT 2019:

Research and Innovation for Bioeconomy

26-28th September, 2019

PROGRAMME

Vytautas Magnus University
Akademija, Kaunas district, Lithuania
<http://www.ruraldevelopment.lt>

Dear scientists and experts, rural development policy makers and colleagues,

*We are pleased to invite you to participate already in the 9th International Scientific Conference “**Rural Development 2019: Research and Innovation for Bioeconomy**”. It already became as biannual tradition to meet colleagues all over the world here. In addition, we are pleased that this event became a communal area for international scientific interdisciplinary discussion on rural development and innovations.*

It is a pleasure for us to welcome you at Vytautas Magnus University Agriculture Academy, which is developing due to the challenges of smart growth and bioeconomy. The University is becoming more and more advanced in science and more open to society for cooperation and sharing knowledge.

The Mission of University reveals our main aspiration: to develop and disseminate scientific knowledge and sincerely strive for save and healthy food and ful-fledged living environment for all citizens of Lithuania.

We are able do more „step by step“ with global changes and innovations by sharing innovative ideas, experience and results of our researches.

The existing and rising challenges of bioeconomy will be discussed in different Conference sections:

- *Agro-innovations and Food Technologies;*
- *Biosystems Engineering and Environment Integrity;*
- *Multifunctional Approach for Sustainable Use of Bio-Resources;*
- *Social Research and Innovation in Bioeconomy for Sustainable Transformation and Wellbeing in Rural Areas.*

Together we can create synergy from broad participation from different sectors of the society, the scientists, practitioners, policy makers, private sector actors, NGOs, even young researchers and students. All the participants will be awarded the possibility to express their attitude towards the scientific issues related to rural development, especially in the focus of bioeconomy challenges.

We are inviting you to enjoy the event and co-operation of scientists, policy makers and practioners.

Yours sincerely,
Prof. dr. Antanas Maziliauskas
Chancellor of Vytautas Magnus University Agriculture Academy,
Chairman of Scientific Committee

Scientific committee:

Chairperson – prof. dr. Antanas Maziliauskas – Chancellor of the Vytautas Magnus University Agriculture Academy

Vice-chairperson – dr. Jurgita Baranauskienė – Deputy Chancellor of the Vytautas Magnus University Agriculture Academy

Vice-chairperson – prof. dr. Julija Kiršienė – Vice-Rector of the Vytautas Magnus University

Vice-chairperson – prof. dr. Asta Raupelienė – Editor-in-Chief of the Proceedings of “Rural Development” International Conference

Members:

Prof. dr. Aleksandrs Adamovičs (Latvia University of Life Sciences and Technologies, Latvia)

Prof. dr. Per Angelstam (Swedish University of Agricultural Science, Sweden)

Prof. dr. Andres Annuk (Estonian University of Life Sciences, Estonia)

Prof. dr. Vilma Atkočiūnienė (Vytautas Magnus University Agriculture Academy, Lithuania)

Prof. dr. Gediminas Brazaitis (Vytautas Magnus University Agriculture Academy, Lithuania)

Prof. dr. Natalija Burbulis (Vytautas Magnus University Agriculture Academy, Lithuania)

Dr. Donatello Caruso (University of Foggia, Italy)

Prof. dr. Darius Danusevičius (Vytautas Magnus University Agriculture Academy, Lithuania)

Prof. dr. Sigitas Daukilas (Vytautas Magnus University Agriculture Academy, Lithuania)

Prof. dr. Quirijn de Jong van Lier (University of São Paulo, Brasil)

Prof. dr. Ignacio J. Diaz-Maroto (University of Santiago de Compostela, Spain)

Prof. dr. Elazar Fallik (Agricultural Research Organization, Israel)

Prof. dr. Yoshiharu Fujii (Tokyo University of Agriculture and Technology, Japan)

Prof. habil. dr. Juan Jose Garcia Machado (University of Huelva, Spain)

Assoc. prof. dr. Esperanza Gil-Soto (University of La Laguna, Spain)

Prof. dr. Boriss Gjunzburgs (Riga Technical University, Latvia)

Dr. Thomas Hoffmann (Leibniz-Institute for Agricultural Engineering Potsdam-Bornim, Germany)

Assoc. prof. dr. Algirdas Janulevičius (Vytautas Magnus University Agriculture Academy, Lithuania)

Prof. dr. Elvyra Jarienė (Vytautas Magnus University Agriculture Academy, Lithuania)

Prof. dr. Algirdas Jasinskas (Vytautas Magnus University Agriculture Academy, Lithuania)

Assoc. prof. dr. Darija Jodaugienė (Vytautas Magnus University Agriculture Academy, Lithuania)

Prof. dr. Eglė Jotautienė (Vytautas Magnus University Agriculture Academy, Lithuania)

Prof. dr. Vigilijus Jukna (Vytautas Magnus University Agriculture Academy, Lithuania)

Prof. dr. Karlheinz Knickel (University of Évora, Portugal)

Prof. dr. Algis Krupavičius (Vytautas Magnus University, Lithuania)
Prof. dr. Violeta Makarevičienė (Vytautas Magnus University Agriculture Academy, Lithuania)
Prof. dr. Vida Malienė (Liverpool John Moores University, United Kingdom)
Prof. dr. Aušra Marcinkevičienė (Vytautas Magnus University Agriculture Academy, Lithuania)
Prof. habil. dr. Marek Marks (University of Warmia and Mazury, Poland)
Prof. habil. dr. Renata Marks-Bielska (University of Warmia And Mazury in Olsztyn, Poland)
Assoc. prof. dr. Jiri Mašek (Czech University of Life Science in Prague, Czech Republic)
Assoc. prof. dr. Daniel Meyer (North-West University, South Africa)
Dr. Natanya Meyer (North-West University, South Africa)
Prof. dr. Saulius Mickevičius (Vytautas Magnus University, Lithuania)
Assoc. prof. dr. Anabela Paiva (University of Trás-os-Montes and Alto Douro, Portugal)
Assoc. prof. dr. Rasa Pakeltienė (Vytautas Magnus University Agriculture Academy, Lithuania)
Prof. dr. Velta Parsova (Latvia University of Life Sciences and Technologies, Latvia)
Prof. habil. dr. Irina Pilvere (Latvia University of Life Sciences and Technologies, Latvia)
Prof. dr. Arvydas Povilaitis (Vytautas Magnus University Agriculture Academy, Lithuania)
Assoc. prof. dr. Michael Radin (Rochester Institute of Technology, United States of America)
Assoc. prof. dr. Mladen Radišić (University of Novi Sad, Serbia)
Prof. habil. dr. Baiba Rivža (Latvia University of Life Sciences and Technologies, Latvia)
Prof. habil. dr. Heinz Roehle (Technical University of Dresden, Germany)
Prof. dr. Yaşar Sari (Eskisehir Osmangazi University, Turkey)
Assoc. prof. dr. Lyudmila Severin-Mrachkovska (Kyiv National Economic University by Vadym Hetman, Ukraine)
Prof. dr. Maryna Solesvik (Nord University, Norway)
Assoc. prof. dr. Włodzimierz Sroka (WSB University, Poland)
Prof. dr. Jari Stenvall (Tampere University, Finland)
Prof. dr. Neringa Stončiuvienė (Vytautas Magnus University Agriculture Academy, Lithuania)
Assoc. prof. dr. Marek Szarucki (Cracow University of Economics, Poland)
Prof. dr. Egidijus Šarauskis (Vytautas Magnus University Agriculture Academy, Lithuania)
Assoc. prof. dr. Rimantas Vaisvalavičius (Vytautas Magnus University Agriculture Academy, Lithuania)
Prof. dr. Vlada Vitunskienė (Vytautas Magnus University Agriculture Academy, Lithuania)
Prof. dr. Ivona Vrdoljak Raguz (University of Dubrovnik, Croatia)

Organizing committee:

Chairperson of conference	prof. dr. Astrida Miceikienė
Vice-Chairperson of conference	assoc. prof. dr. Jolita Greblikaitė assoc. prof. dr. Judita Černiauskienė
Administrators of conference	Aurelija Markelytė

Members:

Assoc. prof. dr. Jolita Abraitienė
Prof. dr. Aušra Blinstrubienė
Assoc. prof. dr. Jonas Čėsna
Dr. Rita Čepulienė
Assoc. prof. dr. Rūta Dromantienė
Assoc. prof. dr. Antanas Dumbrauskas
Ingrida Ignotaitė
Assoc. prof. dr. Dalia Juočiūnienė
Assoc. prof. dr. Zita Kriaučiūnienė
Minvydas Liegus
Mindaugas Maciulevičius
Assoc. prof. dr. Valdemaras Makutėnas
Deimena Montvydaitė
Assoc. prof. dr. Anastasija Novikova
Rita Petlickaitė
Dr. Rasa Pranskūnienė
Lect. Rolandas Rakštys
Assoc. prof. dr. Daiva Rimkuvienė
PhD student Aušra Rudinskienė
PhD student Mindaugas Samuolaitis
Assoc. prof. dr. Rytis Skominas
Lect. dr. Gerda Šilingienė
PhD student Linas Šilinis
Assoc. prof. dr. Jolanta Valčiukienė
Dr. Gediminas Vasiliauskas
Assoc. prof. dr. Gintarė Vazonienė
Dr. Antanas Venckus
Assoc. prof. dr. Remigijus Žalkauskas
Laura Žemaitienė

Proceedings of the International Scientific conference “Rural Development 2019” will be applied for indexing by Clarivate Analytics Web of Science (CA WoS), Business Source Complete (EBSCO).

All papers have been peer reviewed by two reviewers and will be published submitted on the Opened Journal System in the Proceedings of the International Scientific conference “Rural Development 2019” until 1st of January, 2020.
Website of the OJS: <https://ejournals.vdu.lt/index.php/rd>

Conference website: <http://www.ruraldevelopment.lt>

Thursday, 26th September, 2019

**Event place: Central Building of Vytautas Magnus University
Agriculture Academy, Studentų str. 11, Akademija, Kaunas distr.,
Lithuania**

- 8.00–9.00 Registration of participants (*Lobby of Central building, Studentų str. 11, Akademija*)
- 9.00–13.00 Plenary session** (*Hall of Central Building, 2nd floor*)
Chairpersons: prof. dr. Kęstutis Romaneckas, assoc. prof. dr. Anastasija Novikova
Vytautas Magnus University Agriculture Academy (Lithuania)
- 9.00–9.30 Welcome speech
Minister of Agriculture Andrius Palionis
Chairperson: Chancellor of Vytautas Magnus University Agriculture Academy prof. dr. Antanas Maziliauskas
- 9.30–10.00 Sustainable Transport by Optimal Routing in Complex Delivery Tasks
Prof. dr. László T. Kóczy
Budapest University of Technology and Economics (Hungary)
- 10.00–10.30 Creating a knowledge-based bio-economy that increases well-being in rural areas: the need for a transdisciplinary research approach
Prof. dr. Karlheinz Knickel
University of Évora (Germany)
- 10.30–11.00 Agriculture 4.0 in role of supporting platform for Bioeconomy and Precision Farming
Assoc. prof. dr. Jiří Mašek
Czech University of Life Sciences Prague (Czech Republic)
- 11.00–11.30 Coffee break**
- 11.30–12.00 Using soil physical data and modelling to assess soil quality and water use in agriculture under climate change scenarios
Prof. dr. Quirijn de Jong van Lier
University of São Paulo (Brazil)
- 12.00–12.30 Wood use to mitigate climate change and support bioeconomy (carbon storage in wood products and biochar)
Dr. Gediminas Jasinevičius
Norwegian Institute for Bioeconomy (Norway)
- 12.30–13.00 Mastering agritech again: could the training of intermediate players ease the deployment of precision agriculture ?
Assoc. prof. dr. Davide Rizzo
UniLaSalle (France)
- 13.00–14.00 **Lunch** (*5th floor Lobby of Central Building*)
- 14.00–17.00 **Discussions at Business and Science Forum „The Development of Bioeconomy as a Prerequisite for Long-Term Competitiveness and Welfare Creation“** (*Hall of Central Building*)
- 17.00–17.45 **Meeting with researchers** (*Room No. 217, Central Building*)
- 19.00 **Gala Dinner** (*Raudondvaris Manor Arts Incubator, Pilies str. 1, Raudondvaris*)

Friday, 27th September, 2019

8.30–13.00 **Parallel Sessions** (5th floor of Central Building)

Section 1. **Agro-innovations and Food Technologies** (Auditorium No. 520);

Section 2. **Biosystems Engineering and Environment Integrity** (Auditorium No. 524);

Section 3. **Multifunctional Approach for Sustainable Use of Bio-Resources** (Auditorium No. 503, 512);

Section 4. **Social Research and Innovation in Bioeconomy for Sustainable Transformation and Wellbeing in Rural Areas** (Auditorium No. 507, 509, 515).

10.30–11.00 **Coffee break and poster presentation**

9.00–13.00 **Other Parallel Meetings**

9.00–11.00 **Project Ideas Sharing and Discussion** (Room No. 445, Central Building)

Speakers:

Gintarė Kučinskienė “LAAS Experience in International and Innovation Projects”
PI Lithuanian Agricultural Advisory Service (Lithuania)

Marco Camboni “Substitution of Chemicals of Concern – Promoting Innovation by Facilitating Partnerships within the Bio-economy”
RPA Europe srl (Italy)

Chairperson: assoc. prof. dr. Anastasija Novikova
Vytautas Magnus University Agriculture Academy (Lithuania)

10.00–13.15 **International Meeting of Baltic Sea Network - for the European Agricultural Fund for Rural Development (BSN-EAFRD)**
(Room No. 229, Central Building)

10.30–12.00 **Presenting Different International Scientific Journals: Meeting with Editorial Board members** (Room No. 324, Central Building)

Chairperson: prof. dr. Marina Solesvik
Nord University (Norway)

13.00–14.00 **Lunch** (5th floor Lobby of Central Building)

14.00–15.30 **Final plenary session** (Hall of Central Building)

Chairperson: assoc. prof. dr. Jolita Greblikaitė
Vytautas Magnus University Agriculture Academy (Lithuania)

Section 1. *Agro-innovations and Food Technologies;*
Assoc. prof. dr. Zita Kriaučiūnienė
Vytautas Magnus University Agriculture Academy (Lithuania)

Section 2. *Biosystems Engineering and Environment;*
Prof. dr. Eglė Jotautienė
Vytautas Magnus University Agriculture Academy (Lithuania)

Section 3. *Multifunctional Approach for Sustainable Use of Natural Resources;*
Prof. dr. Darius Danusevičius
Vytautas Magnus University Agriculture Academy (Lithuania)

Section 4. *Social Research and Innovation in Bioeconomy for Sustainable Transformation and Wellbeing in Rural Areas*
Prof. dr. Vilma Atkočiūnienė
Vytautas Magnus University Agriculture Academy (Lithuania)

16.00–18.00 **Kaunas City Tour**

Saturday, 28th September, 2019

10.00–16.00 Cultural Tour “Romantic Panemuné and its Enchanting Landscape”

Business and Science Forum

„THE DEVELOPMENT OF BIOECONOMY AS A PREREQUISITE FOR LONG-TERM COMPETITIVENESS AND WELFARE CREATION“

Thursday, 26th September (*Hall of Central Building, 2nd floor*)

The purpose of the forum is to discuss the challenges and opportunities of modernization of bioeconomy sectors and innovative solutions for developing a competitive bioeconomy and creating economic, social and environmental welfare and rural areas vitality.

8.00–9.00 Registration of Participants (*Lobby of Central building, Studentų str. 11, Akademija*)

9.00–9.30 Opening Ceremony

9.30–11.00 Sharing Good Practice in Applying Innovations in Biobusiness
(*Near the Hall of Central Building, 2nd floor*)

Biobusiness companies:

– “**Lietuvos uogų augintojų, perdirbėjų ir prekybininkų asociacija**”. Lithuania Berry Growers, Processors and Traders Association.

– **UAB “Maistinių vabzdžių ferma**”. Company producing frozen, dried crickets and crickets flour.

– **UAB “SoTu SoTu**”. Company producing functional foods such as freeze-dried various berries, vegetables, herbs, seeds powder, and etc.

– „**URBANFOOD**“. Company producing functional food products, such as a variety of fruit, vegetable and seed powder and corn sticks.

– **AB “AUGA group**”. Company producing a wide range of organic food products: fruits, berries, mushrooms, soups, poultry, dairy products and etc.

*Moderator: **assoc. prof. dr. Dalia Juočūnienė***

Vytautas Magnus University Agriculture Academy (Lithuania)

11.00–11.30 Coffee break

11.30–13.00 Discussion with Producers of Bioproducts. Degustation of Bioproducts (*Near the Hall of Central Building, 2nd floor*)

*Moderator: **assoc. prof. dr. Dalia Juočūnienė***

Vytautas Magnus University Agriculture Academy (Lithuania)

13.00–14.00 Lunch (*5th floor Lobby of Central Building*)

14.00–15.30 1 panel discussion: Bioeconomy Development Strategies: How to Strengthen the Connection Between Economy, Society and the Environment?

*Moderator: **Virginija Kargytė***

Manager of the Interreg Baltic Sea Region Project “Unlocking the Potential of Bio-based Value Chains in the Baltic Sea Region” (BalticBiomass4Value)

Themes of the panel discussion:

– The role of bioeconomy development in climate change mitigation.

– Transition from narrow specialization to industrial symbiosis strategy.

– Boundaries of bioeconomy and prospects of biotechnology and genetics to satisfy increasing demands for bio-based resources and products.

– Key factors of success in shifting from non-renewable fuels and other resources based economy to bio-based economy, which would be higher value-added, more socially inclusive and environment-friendly.

Panel discussion speakers:

Dovilė Zdanavičienė – Head of the Climate Change Management Policy Group at the Ministry of Energy of the Republic of Lithuania

Zigmas Medingis – Counsellor of the Division of Crop Production and Agri-Environment at the Ministry of Agriculture of the Republic of Lithuania

Kęstutis Juščius – CEO and the main stakeholder of the AUGA group, which is one of the largest groups of companies in the Baltic region managing agricultural companies and implementing socially and environmentally sustainable eco-business model

Tomas Andrejauskas – Founding Partner of SatiMed, the company researching, developing and manufacturing phytocannabinoid-based medicinal, nutritional and cosmetic products; and Vice President of the Lithuanian Biotechnology Association

Dr. Monika Kavaliauskė – CEO of CasZyme, the startup company aiming to develop new discoveries, innovative applications and top-quality research in the field of CRISPR based Molecular Tools and to support researchers and companies practicing gene-editing worldwide

Dr. Per Møller – Head of Symbiosis Center Denmark, which is a national knowledge center working to identify and facilitate industrial symbiosis projects between public and private industrial partners and, thus, to enable the use of residues from one company as a resource in another for the production of valuable materials and energy

15.30–15.45 Coffee break

15.45–17.00 2 panel discussion: How Social Innovation Can Help Rural Areas to Become Smarter?

Moderator: **prof. dr. Vilma Atkočiūnienė**

Vytautas Magnus University Agriculture Academy (Lithuania)

Indicative questions for open discussion:

– **How Social Business Keeps Rural Communities Vitality?**

Key speaker: **Jurgita Ribinskaitė-Glatzer** – Director of Public Institution „Geri norai LT“, head of the international organization “Reach for change” for the Baltic States

– **How to Develop Regional Food System in the Context of Bioeconomy?**

Key speaker: **Dr. Talis Tisenkopfs** – Baltic Studies Centre Director, Professor, Department of Sociology, Faculty of Social Sciences, University of Latvia

Other debaters:

Giedrė Kvieskienė – Professor, Vytautas Magnus University

Karlheinz Knickel – Visiting Research Professor at RURALIS – Institute for Rural and Regional Research / Norwegian University of Science and Technology in Trondheim, Norway; Research Coordinator at Instituto de Ciências Agrárias e Ambientais Mediterrânicas (ICAAM) at Universidade de Évora, Portugal; Research Associate at PRAC – Policy Research & Consultancy in Bad Soden, Germany

Mindaugas Maciulevičius – Founding member and director of the AgriCoop developing short supply chains Lithuanian Farm Quality; Vice-President of European agri-cooperatives association COGECA; Member of the European Economic and Social Committee, Vice-President of Group III

Dr. Arūnas Svitojus – president of Chamber of Agriculture, Represents the interests of Lithuanian farmers at the international level, Ensures the membership of the Chamber of Agriculture in international organizations (COPA-COGECA, IDF, Council of Baltic agricultural Organisations)

Section 1.

AGRO-INNOVATIONS AND FOOD TECHNOLOGIES

Friday, 27th September 2019

Auditorium No. 520 Central building (Studentu str. 11, Akademija)

Chairpersons assoc. prof. dr. Zita Kriaučiūnienė,

prof. dr. Quirijn de Jong van Lier

1.1 Quality of Food Raw Materials	
1.2 Plant Growth Optimization for Sustainable Crop Production	
1.3 Integration of Environmentally Friendly Products into Farming System	
8.30–8.45	<p>Application of ozone in grain drying: autonomous sensor system construction and peculiarities</p> <p>Jānis Kleperis¹, Alberts Kristiņš¹, Juris Veinbergs¹, Irina Gvardina¹, Dainis Viesturs², Ādolfs Ruciņš², Evita Straumīte², Biruta Sloka¹, Juris Brūveris³ ¹University of Latvia (Latvia) ²Latvia University of Life Sciences and Technologies (Latvia) ³Ltd “Ozone Tech” (Latvia)</p>
8.45–9.00	<p>Fusariotoxins in feed of dairy cows and carry-over to milk and impact on raw milk qualitative indicators</p> <p>Rimvydas Falkauskas, Violeta Baliukonienė, Bronius Bakutis, Jurgita Jovaišienė <i>Lithuanian University of Health Sciences Veterinary Academy (Lithuania)</i></p>
9.00–9.15	<p>Hydroponic devices for green fodder production: a review</p> <p>Andrius Grigas, Aurelija Kemzūraitė, Dainius Steponavičius <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
9.15–9.30	<p>Productivity and allelopathic properties of multifunctional crops</p> <p>Zita Kriaučiūnienė, Rita Čepulienė, Aušra Marcinkevičienė, Rimantas Velička, Aušra Rudinskienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
9.30–9.45	<p>Effectiveness of supplementary mineral fertilization of organically grown winter spelt with K and Mg</p> <p>Józef Tyburski, Krystyna Żuk-Gołaszewska, Kinga Treder, Marek Marks <i>University of Warmia and Mazury in Olsztyn (Poland)</i></p>
9.45–10.00	<p>Characterization of microalgae based feed supplement and their possible influence on cattle rumen microbial ecosystem</p> <p>Svetlana Malyugina, Oldrich Latal <i>Research Institute for Cattle Breeding, Ltd (Czech Republic)</i></p>
10.00–10.15	<p>The effect of spice extracts on strawberry pathogen <i>Botrytis cinerea</i></p> <p>Lina Šernaitė, Alma Valiuškaitė, Neringa Rasiukevičiūtė, Edita Dambrauskienė, Pranas Viškelis <i>Lithuanian Research Centre for Agriculture and Forestry (Lithuania)</i></p>

10.15-10.30	<p>Application of <i>Salvia officinalis</i> and <i>Pinus sylvestris</i> essential oils for controlling <i>Colletotrichum</i> spp.</p> <p>Armina Morkeliūnė¹, Neringa Rasiukevičiūtė¹, Daiva Burokienė², Alma Valiuškaitė¹ ¹Lithuanian Research Centre for Agriculture and Forestry (Lithuania) ²Nature research centre (Lithuania)</p>
10.30–11.00	Coffee break and poster session
11.00-11.15	<p>Rural tourism environment for far-away tourism markets</p> <p>Tatjana Lejava, Zane Vitolina Latvia University of Life Sciences and Technologies (Latvia)</p>
11.15-11.30	<p>Fibers from linseed straw – solving environmental problems in Kazakhstan</p> <p>Benjamin Selge, Hans-Jörg Gusovius, Thomas Hoffmann Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB) (Germany)</p>
11.30-11.45	<p>Sustainable, circular and innovative value chains using growing substrata alternative to peat for the cultivation of nutraceutical species</p> <p>Carlo Greco¹, Antonio Comparetti², Michele Massimo Mammano¹, Santo Orlando² ¹Council for Agricultural Research and Economics (Italy) ²University of Palermo (Italy)</p>
	Poster presentation
	<p>Herbs as a source of natural preservatives against rancidity in the low-moisture bakery products</p> <p>Kateryna Iorgachova, Olga Makarova, Nataliia Sokolova, Kateryna Khvostenko Odessa National Academy of Food Technologies (Ukraine)</p>
	<p>Quality evaluation of hardi kiwi (<i>Actinidia kolomikta</i>) fruit by using non-destructive and holistic research methods</p> <p>Aurelija Paulauskienė, Živilė Tarasevičienė, Daiva Šileikienė Vytautas Magnus University Agriculture Academy (Lithuania)</p>
	<p>Quality of sweet potato as a raw material for food processing</p> <p>Barbara Sawicka¹, Barbara Krochmal-Marczak², Dominika Skiba¹, Piotr Pszczółkowski³ ¹University of Life Science in Lublin (Poland) ²State Higher Vocational School. St. Pigońia in Krosno (Poland) ³Experimental Station of Varieties Ratings in Uhnin, COBORU (Poland)</p>
	<p>Jerusalem artichoke (<i>Helianthus tuberosus</i> L.) as energy raw material</p> <p>Dominika Skiba¹, Barbara Sawicka¹, Bernadetta Bienia², Anna Kiełtyka-Dadasiewicz¹, Honorata Danilcenko³ ¹University of Life Science in Lublin (Poland) ²State Higher Vocational School. St. Pigońia in Krosno (Poland) ³Vytautas Magnus University Agriculture Academy (Lithuania)</p>

	<p>Analysis of wine quality from the different apple cultivars during storage</p> <p>Judita Černiauskienė, Jurgita Kulaitienė, Milita Ubė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Fungi and mycotoxins in fresh bee pollen</p> <p>Jolanta Sinkevičienė¹, Aušra Marcinkevičienė¹, Violeta Baliukonienė², Jurgita Jovaišienė² ¹<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i> ²<i>Veterinary Academy of Lithuanian University of Health Sciences (Lithuania)</i></p>
	<p>Food quality management based on qualimetric methods</p> <p>Valentina Yankovskaya, Nina Dunchenko, Dinara Artykova, Marina Ginzburg, Kermen Mikhaylova, Elena Voloshina <i>Russian State Agrarian University - Moscow Timiryazev Agricultural Academy (Russian Federation)</i></p>
	<p>Created of an integrated quality system for the production of canned meat for child nutrition</p> <p>Elena Voloshina¹, Nina Dunchenko¹, Arina Odintcova¹, Svetlana Kuptcova¹, Olga Fedotova² ¹<i>Russian State Agrarian University - Moscow Timiryazev Agricultural Academy (Russian Federation)</i> ²<i>All-Russian Research Institute of Dairy Industry (Russian Federation)</i></p>
	<p>Suitability of potato varieties and breeding material for growing under stressful conditions in North Kurzeme region of Latvia</p> <p>Lidija Vojevoda, Ilze Skrabule <i>Institute of Agricultural Resources and Economics (Latvia)</i></p>
	<p>Evaluation of downy mildew (<i>Hyaloperonospora brassicae</i>) infection severity on different cruciferous oilseed crops</p> <p>Eve Runno-Paurson¹, Peeter Lääniste¹, Viacheslav Eremeev¹, Eve Kaurilind¹, Hanna Hõrak¹, Ülo Niinemets^{1,2}, Luule Metspalu¹ ¹<i>Estonian University of Life Sciences (Estonia)</i> ²<i>Estonian Academy of Sciences (Estonia)</i></p>
	<p>Effectiveness of winter rye and winter triticale cultivation in agricultural systems</p> <p>Bogumił Rychcik, Marek Marks <i>University of Warmia and Mazury in Olsztyn (Poland)</i></p>
	<p>The effect of foliar application of amino acids on their content and composition in winter wheat grain</p> <p>Rūta Dromantienė, Irena Pranckietienė, Gvidas Šidlauskas, Vita Smalstienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Impact of sustainable tillage technologies on faba bean crop productivity and quality</p> <p>Rasa Kimbirauskienė, Kęstutis Romaneckas, Sidona Buragienė, Aušra Sinkevičienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>

	<p>The effect of living mulches on variation of soil properties in continuous maize cultivation</p> <p>Aida Adamavičienė, Kęstutis Romaneckas, Sidona Buragienė, Vilma Naujokienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Agricultural analysis of clovers species short-term growing for green fertilizers</p> <p>Evaldas Klimas, Modestas Žemaitis <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>The effect of growth regulators on <i>Stevia rebaudiana Bertoni callus</i> induction in vitro and steviol glycosides accumulation</p> <p>Neringa Juškevičiūtė, Aušra Blinstrubienė, Natalija Burbulis, Rasa Žūkienė, Ramunė Masiienė <i>Vytautas Magnus University (Lithuania)</i></p>
	<p>Influence of biological preparations on spring wheat crop</p> <p>Rita Čepulienė, Darija Jodaugienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>

Section 2.

BIOSYSTEMS ENGINEERING AND ENVIRONMENT INTEGRITY

Friday, 27th September 2019

Auditorium No. 524 Central building (Studentų str. 11, Akademija)

Chairpersons prof. dr. Algirdas Jasinskas, assoc. prof. dr. Jiří Mašek

2.1 Agricultural Machinery and Technologies 2.3 Power and Transport Machines 2.5 Renewable Energetics 2.6 Safety of Environment and Technologies 2.7 Durability of Engineering Structures and Sustainable Construction 2.8 Sustainable Animal Husbandry	
8.30–8.45	The problems of microclimate in Lithuanian cowsheds Rolandas Bleizgys, Indrė Bagdonienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>
8.45–9.00	Development of fuzzy blocks intended for agents constituting intelligent system of mobile robot movement planning Andrius Nemeikšis, Vitalijs Osadčuks <i>Latvia University of Life Sciences and Technologies (Latvia)</i>
9.00–9.15	Method of designing fuzzy system for planning robot manipulator real-time movement in a static environment Daiva Nemeikšytė, Vitalijs Osadčuks <i>Latvia University of Life Sciences and Technologies (Latvia)</i>
9.15–9.30	Have tractor manufacturers borne soil compaction in mind over the last 40 years? Antonio Comparetti¹, Pierluigi Febo¹, Carlo Greco², Santo Orlando¹ ¹ <i>University of Palermo (Italy)</i> ² <i>Council for Agricultural Research and Economics (Italy)</i>
9.30–9.45	Determination of the rational profile for the disk working tool when cultivating of sod podzolic soils Pavlo Zabrodskiy¹, Saveli Kukharets¹, Andrii Zabrodskiy², Jonas Čėsna² ¹ <i>Zhytomyr National Agroecological University (Ukraine)</i> ² <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>
9.45–10.00	The impact of tillage systems on properties of fuel pellets produced from faba bean wastes Aleksandra Minajeva, Algirdas Jasinskas, Jonas Čėsna <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>

10.00-10.15	<p>Technological, technical and quality assessment of maize silage making and unloading from trench</p> <p>Algirdas Jasinskas¹, Gytis Pašvenskas¹, Mečys Palšauskas¹, Jiří Souček² ¹<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i> ²<i>Research Institute of Agricultural Engineering (Czech Republic)</i></p>
10.15-10.30	<p>Short rotation energy plants preparation and utilization for energy conversion</p> <p>Vilma Banionienė, Algirdas Jasinskas, Inga Kibirškštienė, Gintas Viselga <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
10.30–11.00	Coffee break and poster session
11.00-11.15	<p>Enzymatic catalysis for in-situ (trans) esterification of high free fatty acid rapeseed oil to produce a mixture of mineral diesel and biodiesel fuel</p> <p>Miglė Šantaraitė, Eglė Sendžikienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
11.15-11.30	<p>LCA applied to an anaerobic digestion plant for biomethane and digestate production</p> <p>Antonio Comparetti¹, Pierluigi Febo¹, Carlo Greco², Kęstutis Navickas³, Santo Orlando¹, Kęstutis Venslauskas³ ¹<i>University of Palermo (Italy)</i> ²<i>Council for Agricultural Research and Economics (Italy)</i> ³<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
11.30-11.45	<p>Heavy metal accumulation in different parts of trees grown on sewage sludge</p> <p>Valdas Paulauskas¹, Alfreda Kasiulienė² ¹<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i> ²<i>Luleå University of Technology (Sweden)</i></p>
11.45-12.00	<p>Separate municipal waste flow management analysis of the city Kaunas (Lithuania) period 2014-2018</p> <p>Laima Česonienė, Daiva Šileikienė, Edita Mažuolytė-Miškinė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
12.00-12.15	<p>Main defects and deteriorations of reinforced concrete structures in abandoned hydraulic structures of Lithuania</p> <p>Raimondas Šadzevičius, Rytis Skominas, Tatjana Sankauskienė, Dainius Ramukevičius <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
12.15-12.30	<p>Effect of aggregates impurity on concrete properties</p> <p>Rytis Skominas, Vincas Gurskis, Raimondas Šadzevičius, Dainius Ramukevičius <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
12.30-12.45	<p>Analysis of the temperature distribution of the cows bearing area</p> <p>Dainius Ramukevičius, Raimondas Šadzevičius, Rytis Skominas, Vincas Gurskis <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>

12.45-13.00	<p>Infiltration of water into the soil depending on the depth of soil cultivation</p> <p>Petr Novák¹, Jiří Mašek¹, Algirdas Jasinskas² ¹ Czech University of Life Sciences Prague (Czech Republic) ² Vytautas Magnus University Agriculture Academy (Lithuania)</p>
	Poster presentation
	<p>Technological description for automating the cultivation of blueberries in blueberry plantations established on depleted peat milling fields</p> <p>Margus Arak, Jüri Olt Estonian University of Life Sciences (Estonia)</p>
	<p>Costs of maintaining fixed assets and their impact on the profitability of agricultural production</p> <p>Zofia Koloszko-Chomentowska¹, Leszek Sieczko², Jolanta Vilkevičiūtė³ ¹ Białystok University of Technology (Poland) ² Warsaw University of Life Sciences- SGGW (Poland) ³ Vytautas Magnus University Agriculture Academy (Lithuania)</p>
	<p>Biomass bottom ash recycling as pavement base</p> <p>Adomas Neteckis¹, Valdas Paulauskas¹, Alfreda Kasiulienė² ¹ Vytautas Magnus University Agriculture Academy (Lithuania) ² Luleå University of Technology (Sweden)</p>
	<p>Exploration of the possibilities for the production of tableware from the bran of various cereals</p> <p>Jüri Olt, Kaarel Soots, Andres Olt, Vahur Rooni Estonian University of Life Sciences, Institute of Technology (Estonia)</p>
	<p>Interspecific hybridization of <i>Native Alnus</i> species in Lithuania</p> <p>Sigitas Tamošaitis, Girmantė Jurkšienė, Virgilijus Baliuckas Lithuanian Research Centre for Agriculture and Forestry (Lithuania)</p>
	<p>Sewage sludge and pharmaceuticals – problems and solutions</p> <p>Lembit Nei¹, Egge Haiba¹, Sandra Victoria Nei² ¹ Tallinn University of Technology (Estonia) ² Tartu University Hospital (Estonia)</p>
	<p>Multi-criteria consolidation of different bio-effects in agriculture</p> <p>Vilma Naujokienė, Indrė Bagdonienė, Rolandas Bleizgys, Daiva Rimkuvienė, Egidijus Šarauskis Vytautas Magnus University Agriculture Academy (Lithuania)</p>
	<p>Biotechnical measures for ammonia control emissions in cowsheds</p> <p>Reda Mažeikienė, Rolandas Bleizgys Vytautas Magnus University Agriculture Academy (Lithuania)</p>

	<p>Genomic selection in Lithuanian dairy cattle</p> <p>Kristina Morkūnienė¹, Astrida Miceikienė² ¹<i>Veterinary Academy of Lithuanian University of Health Sciences (Lithuania)</i> ²<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>The influence of different species of yeasts on mycotoxin concentrations in wheat</p> <p>Gintarė Kasperavičiūtė¹, Algimantas Paškevičius², Laura Knizikevičiūtė¹, Gediminas Gerulis¹ ¹<i>Veterinary Academy of Lithuanian University of Health Sciences (Lithuania)</i> ²<i>Biodeterioration Research Laboratory (Lithuania)</i></p>

Section 3.

MULTIFUNCTIONAL APPROACH FOR SUSTAINABLE USE OF NATURAL RESOURCES

Friday, 27th September 2019

Auditorium No. 503 *Central building* (Studentų str. 11, Akademija)

Chairpersons prof. dr. Laima Česonienė, dr. Michael Manton

3.1 Biodiversity and Sustainability of Ecosystem 3.2 Monitoring and Management of Environment Quality 3.5 Inventory, Management and Productivity of Forest Resources 3.6 Management and Conservation of Wildlife Resources 3.7 Forest Ecosystem Services	
8.30–8.45	<p>Short-term impact of wood ash and nitrogen fertilization on forest floor plant species composition and diversity</p> <p>Guna Petaja, Ilze Kārklīņa, Zaiga Zvaigzne <i>Latvian State Forest Research Institute "Silava" (Latvia)</i></p>
8.45–9.00	<p>Pre-sowing seed treatment with physical stressors induces changes in amount of secondary metabolites in needles of <i>Picea abies</i> seedlings</p> <p>Mantas Kačiušis^{1,2}, Vaida Sirgedaitė-Šėžienė¹, Povilas Žemaitis¹, Vida Mildažienė³, Giedrė Paužaitė³, Kazunori Koga⁴, Masaharu Shiratani⁴, Vitalij Novickij⁵, Virgilijus Baliuckas¹ ¹<i>Lithuanian Research Centre for Agriculture and Forestry (Lithuania)</i> ²<i>Kaunas University of Technology (Lithuania)</i> ³<i>Vytautas Magnus University (Lithuania)</i> ⁴<i>Kyushu University (Japan)</i> ⁵<i>Vilnius Gediminas Technical University (Lithuania)</i></p>
9.00–9.15	<p>Recalculation of forest increment, mortality and drine in Latvia according to updated land use data</p> <p>Linarsds Krumsteds, Andis Lazdins, Aldis Butlers, Jānis Ivanovs <i>Latvian State Forest Research Institute "Silava" (Latvia)</i></p>
9.15–9.30	<p>Spatial planning for functional green infrastructure: land covers for human well-being</p> <p>Michael Manton <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
9.30–9.45	<p>Quantification of greenhouse gas emissions from agricultural soils</p> <p>Jūratė Aleinikovienė¹, Vaiva Jurevičienė¹, Vaclovas Bogužas¹, Dalia Feizienė² ¹<i>Vytautas Magnus University (Lithuania)</i> ²<i>Lithuanian Research Centre for Agriculture and Forestry (Lithuania)</i></p>
9.45–10.00	<p>Nitrogen use and farmers' response to a price changes due to nitrogen taxes</p> <p>Aušra Nausėdienė¹, Andreas Meyer-Aurich² ¹<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i> ²<i>Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB) (Germany)</i></p>

10.00-10.15	<p>Cut-away peatland re-cultivation with fast growing woody plantations: cost-benefit analysis</p> <p>Kristaps Makovskis¹, Dagnija Lazdina¹, Dina Popluga² ¹<i>Latvian State Forest Research Institute "Silava" (Latvia)</i> ²<i>Latvia University of Life Sciences and Technologies (Latvia)</i></p>
10.15-10.30	<p>Agricultural production practices in the buffer area of the National Park Viñales, Cuba: a choice to sustainable development of local communities</p> <p>Martinez Yoel, Ignacio J. Diaz-Maroto <i>University of Santiago de Compostela (Spain)</i></p>
10.30–11.00	Coffee break and poster session
11.00-11.15	<p>Effect of soil preparation method on soil temperature</p> <p>Kārlis Dūmiņš, Toms Štāls, Dagnija Lazdiņa <i>Latvian State Forest Research Institute "Silava" (Latvia)</i></p>
11.15-11.30	<p>Comparison of costs in per-commercial thinning using medium-sized and small-sized harvesters</p> <p>Santa Kaleja, Andis Lazdins, Agris Zimelis <i>Latvian State Forest Research Institute "Silava" (Latvia)</i></p>
11.30-11.45	<p>Influence of initial density on inventory parameters of unthinned Norway spruce stands</p> <p>Juris Katrevics, Rolands Kapostins, Karlis Bickovskis, Aris Jansons <i>Latvian State Forest Research Institute "Silava" (Latvia)</i></p>
11.45-12.00	<p>The opinion of forest owners on European Union subsidies intended for forest management in Latvia</p> <p>Raimonds Bērmanis, Inga Straupe, Andra Zvirbule <i>Latvia University of Life Sciences and Technologies (Latvia)</i></p>
12.00-12.15	<p>Carbon pools in old-growth Scots pine stands on organic soils and its concentration in deadwood: cases study in Latvia</p> <p>Laura Kēniņa, Santa Mača, Ieva Jaunslaviete, Aris Jansons <i>Latvian State Forest Research Institute "Silava" (Latvia)</i></p>
12.15-12.30	<p>Effects of different climatic conditions on birch and poplar seedlings</p> <p>Valda Gudynaitė-Franckevičienė, Valda Araminienė, Iveta Varnagirytė-Kabašinskienė <i>Lithuanian Research Centre for Agriculture and Forestry (Lithuania)</i></p>
	Poster presentation
	<p>Stand stability and volume: how it is affected by tree species richness?</p> <p>Ramūnas Mažėtis, Gediminas Brazaitis, Gintaras Kulbokas, Remigijus Žalkauskas, Michael Manton <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Do urban dwellers „sensitive“ to forest accessibility?</p> <p>Remigijus Žalkauskas, Ana Bernat, Edmundas Bartkevičius <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>

	<p>Economical evaluation of reduced intensity tillage systems, straw and green manure combinations</p> <p>Vaida Steponavičienė, Vaclovas Bogužas, Lina Skinulienė, Asta Bendoraitytė, Aušra Sinkevičienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Defining Benchmarks for Restoration of wet grassland: using the historical range of variability for wader conservation</p> <p>Michael Manton <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Research on Natural Forest Habitats of European Community importance</p> <p>Jolita Abraitienė, Gerda Šilingienė, Rasa Vaitkevičiūtė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Collection of genus <i>Symphyotrichum</i> Nees in Vytautas Magnus University Botanical Garden</p> <p>Indrė Lukšytė, Sonata Kazlauskaitė, Arūnas Balsevičius, Ričardas Narijauskas <i>Vytautas Magnus University (Lithuania)</i></p>
	<p>Influence of ozonated water application on the occurrence of some pests and diseases in spring wheat stand</p> <p>Sonata Kazlauskaitė, Vidmantas Spruogis, Anželika Dautartė, Aurimas Krasauskas <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Soil classification as a tool for the identification of soil management sustainability</p> <p>Rimantas Vaisvalavičius¹, Jonas Volungevičius² ¹<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i> ²<i>Lithuanian Research Centre for Agriculture and Forestry (Lithuania)</i></p>
	<p>Chemical immobilisation of trace elements using industrial by-products</p> <p>Alfreda Kasiulienė¹, Valdas Paulauskas², Ernestas Zaleckas² ¹<i>Luleå University of Technology (Sweden)</i> ²<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Biodegradable chelants for heavy metal removal from sludge and soil-sludge mixtures</p> <p>Ernestas Zaleckas¹, Valdas Paulauskas¹, Oleksandr Karnaukh² ¹<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i> ²<i>Uman National University of Horticulture (Ukraine)</i></p>
	<p>International trade impact on global warmth in textile and clothing industry</p> <p>Ignas Valodka, Vytautas Snieška <i>Kaunas University of Technology (Lithuania)</i></p>

	<p>Seasonality of Lithuanian Nature Tourism: Visitor's Preferences</p> <p>Iveta Varnagirytė-Kabašinskienė¹, Ieva Mačiulytė² ¹<i>Lithuanian Research Centre for Agriculture and Forestry (Lithuania)</i> ²<i>Kolping University of Applied Sciences (Lithuania)</i></p>
	<p>The distribution of free growth in the second year seedlings of Norway spruce seedlings</p> <p>Simonas Šilingas, Gerda Šilingienė, Jolita Abraitienė <i>Vytautas Magnus University (Lithuania)</i></p>
	<p><i>Sarcocystis</i> spp. infection in wild ducks' in Lithuania</p> <p>Jolanta Stankevičiūtė, Rasa Vaitkevičiūtė, Kastytis Šimkevičius <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Verification of applicability of forest growth model AGM in elaboration of forestry projections for National forest reference level</p> <p>Andis Lazdiņš, Guntars Šņepsts, Guna Petaja, Ilze Kārklīņa <i>Latvian State Forest Research Institute "Silava" (Latvia)</i></p>
	<p>Environmental and genetic attributes of wolf trees in Scots pine (<i>Pinus sylvestris</i> L.)</p> <p>Ekaterina Makrickienė, Darius Danusevičius, Gediminas Brazaitis, Michael Manton <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Length of grow season for native tree species in different green spaces</p> <p>Tadas Vaidelys, Lina Straigytė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>

Auditorium No. 512 Central building (Studentų str. 11, Akademija)
Chairperson assoc. prof. dr. Jolanta Valčiukienė, prof. dr. Velta Parsova

<p>3.3 Land Use Planning and Advanced Geomatics 3.4 Sustainable Management of Water Resources 3.8 Aqua Farming – Techniques and Methods</p>	
8.30–8.45	<p>Finding the best locations for furrows in soil berms of drainage ditches to improve water regime in surrounding forest stands using LiDAR data</p> <p>Janis Ivanovs, Raitis Melniks <i>Latvian State Forest Research Institute "Silava" (Latvia)</i></p>
8.45–9.00	<p>Method for shallow drainage ditch network generation using remote sensing data</p> <p>Raitis Melniks, Janis Ivanovs, Andis Lazdins <i>Latvian State Forest Research Institute "Silava" (Latvia)</i></p>
9.00-9.15	<p>Evaluation of impact of fertilization on soil solution chemistry in dominated forest site types in Latvia</p> <p>Ilze Karklina, Arta Bardule <i>Latvian State Forest Research Institute "Silava" (Latvia)</i></p>

9.15-9.30	<p>The formation and optimization of the structure of land tenure and land use in Russia</p> <p>Vasily Nilipovskiy <i>State University of Land Use Planning (Russia)</i></p>
9.30-9.45	<p>Impact of Marijampolė wastewater treatment plant on water Quality of the Šešupė river</p> <p>Laima Česonienė, Midona Dapkienė, Tauras Vasiliauskas <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
10.30–11.00	<p>Coffee break and poster session</p>
	<p>Poster presentation</p>
	<p>The change of natural landscape in Palanga city (Lithuania)</p> <p>Giedrė Ivavičiūtė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Assessment of the agrarian landscape structure in the development area of the major cities of Lithuania</p> <p>Jolanta Valčiukienė, Daiva Juknelienė, Virginija Atkocevičienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Factors affecting urbanization in the rural areas</p> <p>Virginija Gurskienė¹, Vida Malienė¹, Justė Urbaitienė¹, Velta Paršova² <i>¹Vytautas Magnus University Agriculture Academy (Lithuania)</i> <i>²Latvia University of Life Sciences and Technologies (Latvia)</i></p>
	<p>The use of zeolite for water quality management in cold water recirculation aquaculture systems</p> <p>Gražina Žibienė, Alvydas Žibas <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>

Section 4

SOCIAL RESEARCH AND INNOVATION IN BIOECONOMY FOR SUSTAINABLE TRANSFORMATION AND WELLBEING IN RURAL AREAS

Friday, 27th September 2019

Auditorium No. 509 Central building (Studentų str. 11, Akademija)

Chairpersons PhD student Erika Besusparienė, adj. prof. dr. Vesa A. Niskanen

4.1 Multifunctional and Value-Added Agriculture 4.2 Resilience of Agricultural Business and its Infrastructure 4.5 Language and Cultural Education for Professional Development 4.6 Innovations in Accounting and Modelling of Financial Decisions 4.7 Accessibility and Quality of Psychosocial Services in Rural Areas	
8.30–8.45	Exploring a unique rural development concept: the first 20 years of the Auksuciai foundation center in Lithuania Calvin O. Qualset, Leland Ruth, John S. Chiles, Laurence Clement <i>University of California (United States of America)</i>
8.45–9.00	Innovative and cross-sectoral clusters as facilitators of value added chains in agriculture - Smart Agro Clusters in Romania Cornelia Muraru Ionel, Sebastian-Lucian Muraru, Oana-Diana Cristea, Paula Condruz <i>National Institute of Research-Development for Machines and Installations designed to Agriculture and Food Industry (Romania)</i>
9.00–9.15	Water consumption and sewage reduction in chosen food processing enterprises in Poland Anna Zielińska-Chmielewska¹, Luboš Smutka², Sławomir Kalinowski³ <i>¹Poznań University of Economics and Business (Poland)</i> <i>²Czech University of Life Sciences Prague (Czech Republic)</i> <i>³Polish Academy of Sciences (Poland)</i>
9.15–9.30	Impact of ICT use on time structure of advisors work at the Lithuanian agricultural advisory service Linas Stabingis <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>
9.30–9.45	Social insurance for farmers in Poland and Lithuania – a comparative analysis Astrida Miceikienė¹, Damian Walczak², Sylwia Pieńkowska-Kamieniecka³ <i>¹Vytautas Magnus University Agriculture Academy (Lithuania)</i> <i>²Nicolaus Copernicus University in Toruń (Poland)</i> <i>³University of Warmia and Mazury in Olsztyn (Poland)</i>

9.45–10.00	Impact of electronic business on financial accounting Erika Besusparienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>
10.00-10.15	The influence of cooperative banks upon sustainable development of rural areas Zbigniew Korzeb <i>Bialystok University of Technology (Poland)</i>
10.15-10.30	New view at the living conditions in rural areas - the case of Poland and Lithuania Agnieszka Wojewódzka-Wiewiórska¹, Vilma Atkočiūnienė² ¹ <i>Warsaw University of Life Sciences (Poland)</i> ² <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>
10.30–11.00	Coffee break and poster session
11.00-11.15	Estimating consumer preferences for agricultural landscape goods Anastasija Novikova, Bernardas Vazonis <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>
	Poster presentation
	Trends of electronic business in the context of rural development Jolita Greblikaitė, Judita Astrovienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>
	Comparative analysis of berry farming in European countries Jolita Greblikaitė, Deimena Montvydaitė, Audronė Ispiryan <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>
	Methodology for the assessment of effectiveness of Europe innovation partnership Antanas Maziliauskas, Jurgita Baranauskienė, Rasa Pakeltienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>
	Influence of famous people on promotion of local tourism Vitalija Vanagienė, Milda Stončiūtė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>
	Possibilities of engagement of agricultural entities in advanced electronic services Vilma Tamulienė, Ingrida Babenskienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>
	Assessment of environmental pollution in different business sectors in Lithuania Jūratė Savickienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i>

	<p>Factors affecting the use of fertilizer in the context of the fertilizer tax</p> <p>Erika Besusparienė¹, Vesa A. Niskanen² ¹<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i> ²<i>University of Helsinki (Finland)</i></p>
	<p>Public projects for rural development: social benefits</p> <p>Jurgita Baranauskienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Methodology of ecological products certification pricing in the context of sustainable farming</p> <p>Neringa Stončiuvienė, Dalia Juočiūnienė, Astrida Miceikienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Living Labs – innovate business models for rural regions</p> <p>Heidelinde Grüneis, Sigrid Egartner, Julia Niedermayr, Karin Heinschink, Klaus Wagner <i>Federal Institute of Agricultural Economics, Rural and Mountain Research (Austria)</i></p>
	<p>Determinants of intensity of greenhouse gas Emission in Lithuanian agriculture</p> <p>Daiva Makutėnienė, Valdemaras Makutėnas <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Impact of environmental pressure factors on conventional farming output: evidence from a case study in Lithuanian family farms</p> <p>Lina Lauraitienė, Vlada Vitunskienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Opportunities for farm diversification in the development of circular bio-economy farm models</p> <p>Rasa Pakeltienė¹, Gianfranco Maltese² ¹<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i> ²<i>Maltese Agricola (Italy)</i></p>
	<p>Sustainable food consumption: challenges and trends</p> <p>Aistė Čapienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Social innovation in rural areas: reality and challenges</p> <p>Aistė Ragauskaitė, Jan Žukovskis <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>

4.3 Agricultural and Rural Development Policies and Institutional Frameworks	
8.30–8.45	The changing social structure and function of the Tochikairyoku in Japan: a case study of the Iwate Chubu Tochikairyoku Wenjing Liu-Wuerz <i>Iwate Prefectural University (Japan)</i>
8.45–9.00	Assessment of rural social infrastructure services in Lithuania and Poland in the context of green economy Maciej Stawicki¹, Gintarė Vazonienė² <i>¹Warsaw University of Life Sciences (WULS-SGGW) (Poland)</i> <i>²Vytautas Magnus University Agriculture Academy (Lithuania)</i>
9.00–9.15	The factors influencing job satisfaction of agricultural advisors on Southeastern Anatolia region in Turkey Cevahir Kaynakçı¹, İsmet Boz² <i>¹Kahramanmaraş Sütçü İmam University (Turkey)</i> <i>²Ondokuz Mayıs University (Turkey)</i>
9.15–9.30	The role of rural development on Turkish economy İsmet Boz¹, Cevahir Kaynakçı² <i>¹Ondokuz Mayıs University (Turkey)</i> <i>²Kahramanmaraş Sütçü İmam University (Turkey)</i>
9.30–9.45	Latvian state forest development scenarios modelling Rolands Feldmanis, Irina Pilvere <i>Latvia University of Life Sciences and Technologies (Latvia)</i>
9.45–10.00	The role of innovation in sustainable regional development Dace Štefenberga¹, Biruta Sloka² <i>¹Ventspils University of Applied Sciences (Latvia)</i> <i>²University of Latvia (Latvia)</i>
10.00–10.15	Relation between rural development and rural tourism Tayfun Çukur¹, Nuray Kizilaslan², Figen Çukur¹ <i>¹Muğla Sıtkı Kocman University (Turkey)</i> <i>²Tokat Gaziosmanpaşa University (Turkey)</i>
10.15–10.30	Agriculture and rural development policies and institutional frameworks; proposed mapping for wine tourism in Georgia Matsatso Tepnadze <i>Ivane Javakhishvili Tbilisi State University (Georgia)</i>
10.30–11.00	Coffee break and poster session
11.00–11.15	Blockchain as a technology administration of family homestead settlements Valentyna Yakobchuk, Mariia Plotnikova <i>Zhytomyr National Agroecological University (Ukraine)</i>

11.15-11.30	<p>Transdisciplinary conceptual model for holistic sustainable development of green economy</p> <p>Juozas Augutis¹, Rimantas Dapkus¹, Dalius Serafinas², Vladimiras Novosadas³ ¹<i>Vytautas Magnus University (Lithuania)</i> ²<i>Vilnius University (Lithuania)</i> ³<i>Parlament of the Republic of Lithuania, Committee on Health Affairs (Lithuania)</i></p>
11.30-11.45	<p>Conceptual problems of agricultural cooperation development</p> <p>Alexander Varlamov <i>Non-profit Partnership of Joint Production Cooperatives (Russia)</i></p>
Poster presentation	
	<p>The environment for entrepreneurial attitudes in populations of rural areas in Poland formerly occupied by state-owned farms</p> <p>Renata Marks-Bielska, Damian Opalach <i>University of Warmia and Mazury in Olsztyn (Poland)</i></p>
	<p>Identification of problems of financial autonomy in rural municipalities</p> <p>Laima Skauronė, Deimena Montvydaitė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Why young workers do not choose to work into the agriculture?</p> <p>Laura Girdžiūtė, Erika Besusparienė, Anastasija Novikova, Aušra Nausėdienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Assessment of agricultural homogeneity in Lithuania</p> <p>Rolandas Rakštys, Jolita Greblikaitė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Land, water and material footprints in the BSR countries</p> <p>Genovaitė Liobikienė¹, Janis Brizga², Astrida Miceikienė¹ ¹<i>Vytautas Magnus University (Lithuania)</i> ²<i>University of Latvia (Latvia)</i></p>
	<p>Environmental crisisovercoming as a factor for achieving economic sustainability: theoretical and practical aspects</p> <p>Rolandas Rakštys¹, Alla Cherep², Vitalina Nikitenko², Valentyna Voronkova² ¹<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i> ²<i>Zaporizhzhia National University (Ukraine)</i></p>

Auditorium No. 507 Central building (Studentų str. 11, Akademija)
Chairpersons prof. dr. Asta Raupelienė, assoc. prof. dr. Wioletta Wereda

4.4 Social Capital Building in Rural Areas	
8.30–8.45	<p>Decision-making process and socio-economic dynamics of agricultural actors. The case of a methanation unit in the North of France</p> <p>Miravo Rakotovao¹, Lucile Godard², Loïc Sauvee¹ ¹<i>UniLaSalle Institut Polytechnique (France)</i> ²<i>Agro-Transfert Ressources et Territoires (France)</i></p>

8.45–9.00	<p>Pop-up rural social-innovative hubs – case study from Croatia</p> <p>Sandra Kantar, Kristina Svržnjak <i>Križevci College of Agriculture (Croatia)</i></p>
9.00–9.15	<p>Community involvement in local development: theoretical analysis of community development approaches</p> <p>Liga Paula <i>Latvia University of Life Sciences and Technologies (Latvia)</i></p>
9.15–9.30	<p>Research and innovation as basis of sustainable development</p> <p>Andrea Feher, Tabita Adamov, Manuela Dora Orboi, Miroslav Raicov, Adrian Banes <i>Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" (Romania)</i></p>
9.30–9.45	<p>How can a rural area drive the networking of existing businesses with IT support?</p> <p>Elvira Kuhn¹, Herbert Küstner² <i>¹University of Applied Sciences Trier (Germany)</i> <i>²Café PALAVER (Germany)</i></p>
9.45–10.00	<p>RuTAG (Rural technology Action group) initiative disseminating demand driven technologies in rural areas</p> <p>Ketaki Bapat <i>Principal Scientific Adviser to Government of India (India)</i></p>
10.00–10.15	<p>Communication and knowledge management in innovative enterprises – literature review perspective</p> <p>Wioletta Wereda, Jacek Woźniak <i>Military University of Technology in Warsaw (Poland)</i></p>
10.15–10.30	<p>Knowledge management significance and communication complexity in the context of innovative enterprises: case of Polish NewConnect Market</p> <p>Jacek Woźniak, Wioletta Wereda <i>Military University of Technology in Warsaw (Poland)</i></p>
10.30–11.00	Coffee break and poster session
11.00–11.15	<p>Leisure possibilities in the formation the cluster case of Lithuania</p> <p>Dalia Perkumienė¹, Biruta Švagždienė² <i>¹Vytautas Magnus University (Lithuania)</i> <i>²Lithuanian Sports University (Lithuania)</i></p>
11.15–11.30	<p>Theming discourse in village development</p> <p>Ingrida Kazlauskienė, Vilma Atkočiūnienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
11.30–11.45	<p>Attitudes towards the scope of government: do we have a generation gap?</p> <p>Algis Krupavičius, Ligita Šarkutė <i>Vytautas Magnus University (Lithuania)</i></p>

	Poster presentation
	<p>Wellbeing in rural areas of Lithuania: findings from the European social survey</p> <p>Gintarė Vazonienė, Gabija Jarašiūnaitė-Fedosejeva <i>Vytautas Magnus University (Lithuania)</i></p>
	<p>Influence of sustainable involvement on intent and socially responsible behavior of tourists: case of hotels in the rural district of Asni</p> <p>Youssef Makloul¹, Jaouad Chaabt¹, Rasa Pranskūnienė² ¹<i>Cadi Ayyad University (Morocco)</i> ²<i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Domestic tourism in Lithuania – tendencies and possibilities</p> <p>Jolanta Vilkevičiūtė, Lina Marcinkevičiūtė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Experiencing bioeconomy: straw and joy, straw and waste</p> <p>Rasa Pranskūnienė, Erika Zabulionienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Challenges in teaching mathematics in the context of sustainable development</p> <p>Daiva Rimkuvienė, Janina Kaminskienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>
	<p>Performance evaluation of sustainable employee engagement: case of Lithuanian agriculture chamber</p> <p>Asta Raupelienė, Eglė Šimanskienė <i>Vytautas Magnus University Agriculture Academy (Lithuania)</i></p>

Notes



VMU AA Campus Plan

1. **Central Building** (Faculty of Agronomy, Faculty of Forest Sciences and Ecology)
2. **II Building** (Faculty of Agricultural Engineering)
3. **III Building** (Faculty of Bioeconomy Development, Faculty of Water and Land Management)
4. **IV Building** (Agricultural Science and Technology Park, Valley "Nemunas" Administration)
5. **VI Building**
6. **VII Building** (Institute of Forest Management and Forestry Institute)
7. **VIII Building** (Open Access Research Center)
8. **I Dormitory**
9. **II Dormitory**
10. **III Dormitory** (Kindergarten-nursery)
11. **IV Dormitory** (Health Care Center PSC)
12. **V Dormitory** (Subdistrict administration, shop)
13. **VII Dormitory**
14. **Exhibition Pavilion No.1**
15. **Exhibition Pavilion No.2**
16. **Exhibition Pavilion No.3**
17. **Communication and Technology Transfer Center**

The conference is organized by



VYTAUTAS MAGNUS
UNIVERSITY
AGRICULTURE
ACADEMY

Supported

