

The 6th International Conference on Agricultural and Biological Sciences (ABS 2020)

70

August 23rd-26th, 2020 Online Conference

CA LIGO OFUL AD

CERTIFICATE OF VIDEO PRESENTATION

This certificate is awarded to

Stalis Norma Ethica

in recognition of your video presentation entitled

Prospecting postharvest processing of agricultural and social forest products at Gerlang Village, Central Java

1020 - 20 - DN

27 August, 2020

ydia

Conference Secretary

(97





The 7th International Conference on Agricultural and Biological Sciences (ABS 2021) & (ABB 2021) The 4th International Conference on Applied Biochemistry and Biotechnology

Conference Program

August 9th-11th, 2021 Online Conference



ABS/ABB 2021 CONFERENCE PROGRAM

August 9th-11th, 2021 China Standard Time (UTC/GMT+8:00)

ONLINE-Microsoft Teams Meeting

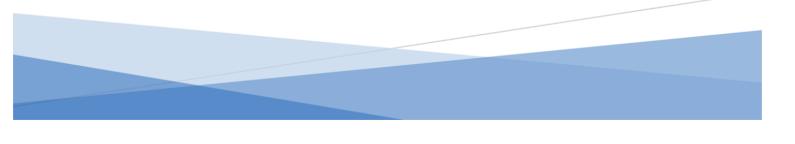


Table of Contents

Part I Conference Schedule
Part II Plenary Speeches
Plenary Speech 1: Carbon Footprint of Milk Production in Latin America
Plenary Speech 2: Agriculture Promotes Human Wellbeing and Supports the Preservation of Local Culture 5
Plenary Speech 3: Study on the Gel Molecular Mechanism of Surimi-Based Products Based on The Interaction of Components
Plenary Speech 4: Electrochemical Strategies for Food Additives Sensing7
Part III Oral Presentations
Online Oral Presentation Guidelines
Session 1_ Crop Physiology and Production9
Session 2_ Plant Physiology and Systematics
Session 3_ Animal Production and Fisheries13
Session 4_ Food Science and Technology15
Session 5_ Biological Science and Applied Biotechnology17
Session 6_ Agriculture, Pest Control, Climate Change and Sociology19
Session 7_ Environmental Control and Green Technology
Session 8_ Medical Biology and Pharmacology23
Session 9_ Industrial Applied Biotechnology
Part IV E-Poster Presentations
Online Poster Guidelines
List of Posters
Part V Acknowledgements

Part I Conference Schedule

MS Teams Link: http://www.academicconf.com/teamslink?confname=ABS2021

Sunday, August 8th, 2021

14:00-17:00	Ice Breaking and MS Teams Application Testing		
Monday,	August 9th, 2021		
MS Teams	Link: http://www.academicconf.com/teamslink?confname=ABS2021		
08:55-09:00	OPENING CEREMONY (Chaired by)		
	Prof. Xuqiao Feng, Bohai University, China		
	WELCOME SPEECH		
09:00-09:10	Prof. Jianrong Li, Conference General Chair, College of Food Science and Engineering, Bohai University, China		
09:10-09:50	Plenary Speech 1: Carbon Footprint of Milk Production in Latin America		
09:10-09:50	Prof. Carlos Gomez, Universidad Nacional Agraria la Molina, Peru		
09:50-10:30	Plenary Speech 2: Agriculture Promotes Human Wellbeing and Supports the Preservation of Local Culture		
	Prof. Hisayoshi Hayashi, University of Tsukuba, Japan		
10:30-10:40	BREAK		
10:40-11:20	Plenary Speech 3: Study on the Gel Molecular Mechanism of Surimi-Based Products Based on The Interaction of Components		
	Prof. Xuepeng Li, Bohai University, China		
	Plenary Speech 4: Electrochemical Strategies for Food Additives Sensing		
11:20-12:00	Prof. Hassan Karimi-Maleh, University of Electronics Science and Technology of China (UESTC), China / Quchan University of Technology, Iran / University of Johannesburg, South Africa		
12:00-14:00	LUNCH BREAK		
14:00-18:30	Oral Session 1: Crop Physiology and Production		

Tuesday, August 10th, 2021MS Teams Link: http://www.academicconf.com/teamslink?confname=ABS2021 (Session 2 & 4)08:30-12:25Oral Session 2: Plant Physiology and Systematics12:30-14:00LUNCH BREAK14:00-18:35Oral Session 4: Food Science and TechnologyMS Teams Link: http://www.academicconf.com/teamslink?confname=ABB2021 (Session 3 & 5)08:30-12:05Oral Session 3: Animal Production and Fisheries12:30-14:00LUNCH BREAK14:00-18:15Oral Session 5: Biological Science and Applied Biotechnology

Wednesday, August 11th, 2021			
MS Teams Li	nk: http://www.academicconf.com/teamslink?confname=ABS2021 (Session 6 & 8)		
08:30-12:40	Oral Session 6: Agriculture. Pest Control, Climate Change and Sociology		
13:00-14:00	LUNCH BREAK		
14:00-18:45	Oral Session 8: Medical Biology and Pharmacology		
MS Teams Li	ink: http://www.academicconf.com/teamslink?confname=ABB2021 (Session 7 & 9)		
08:30-11:55	Oral Session 7: Environmental Control and Green Technology		
12:30-14:00	LUNCH BREAK		
14:00-18:20	Oral Session 9: Industry Applied Biotechnology		

Part II Plenary Speeches

Plenary Speech 1: Carbon Footprint of Milk Production in Latin America



Prof. Carlos Gomez

Department of Animal Husbandry, Universidad Nacional Agraria La Molina, Peru

Biography: Carlos Gomez is a Professor in Universidad Nacional Agraria la Molina, Peru since 1990. He earned his BSc degree in Animal Science and

MSc in Animal Nutrition in the same university and a PhD degree in Animal Biochemistry from U. Guelph (Canada). His main topic of scientific work is livestock nutrition and feeding. Last research topics are feeding strategies for cattle using agro industrial byproducts, the design of mitigation strategies to reduce carbon footprint of fiber, milk and meat from ruminants and the evaluation of adaptation strategies of livestock to the effects of climate change. From these researches, he has produced more than 30 papers in reputed journals. Besides actively supervising undergraduates and postgraduate students, he also became external examiner to postgraduate theses from local and overseas universities as well as being reviewer of international journals. He has been invited as speaker, session chair, moderator and facilitator in local and international workshops, symposia and conferences. He has also led during the last 15 years various research projects with funding from World Bank, Interamerican Development Bank, ILRI, International Potato Center and National Science Council USA. Acting as member of invited committee he contributed recently to the Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (Emissions from livestock and manure management).

Abstract: The study reviews carbon footprint (CF) for milk production in Latin America from cradle to farm gate. The objective is to estimate: 1) the effect of production system (zero-grazing, mixed, and pasture), 2) animal breed (specialized dairy vs. dual-purpose), and 3) climate (tropical vs. temperate) on milk production (kg/cow/day) and CF [kg CO2eq/kg fat and protein corrected milk (FPCM)]. A systematic literature was conducted, in which 11 studies which estimate 32 individual CF were included in the final analysis. Studies included in the final analysis allowed to calculate CF per kg FPCM, included upstream emissions calculations, and used a Tier 2 approach for enteric methane emissions. The range of the CF observed in the region was of 1.54 to 3.57 kg CO₂eq/kg FPCM. In this study, production system had a significant effect on milk production, but not on CF. Zero-grazing compared with pasture systems had a 140% greater milk production (20.1 vs. 8.4 kg of milk/cow/day), but CFs were similar, but numerically greater CF (70%) for pasture systems. This indicates that CFs between production systems can vary greatly, and that low CF might also be possible for systems with lower milk production. Breed and climate had a significant effect on milk production and CF. Compared with specialized dairy cattle, dual-purpose breeds produced less milk and milk with a higher CF. Compared with milk produced in temperate climate, milk produced in tropical climate produced less milk and milk with a higher CF. However, it is not clear if this was an effect of breed or climate, because insufficient studies were available to estimate the effect of breed within climate. A moderate

correlation (R2 = 0.48) was found between milk production and CF with decreasing CF with increasing milk production in low producing cattle but not in high producing cattle. In conclusion, high variability within production systems seem to indicate that it is possible to have low emissions in all productions systems and that increases in milk production can be a major driver to reduce CF in low production systems in Latin America. Comparisons of CF of milk production in Latina America with values of CF of milk production in other continents are discussed.

Plenary Speech 2: Agriculture Promotes Human Wellbeing and Supports the Preservation of Local Culture



Prof. Hisayoshi Hayashi

Faculty of Life and Environmental Sciences, University of Tsukuba, Japan

Biography: Dr. Hisayoshi Hayashi graduated from the University of Tsukuba in 1980. After working as an extension officer for a year in Nagano Prefecture

he moved to Chushin Agricultural Experiment Station (CAES), where he was a member of the station's department of field crop cultivation for six years. He then moved to the University of Tsukuba, where he is a professor and head of the Crop Science laboratories, now. He is the president of Japanese Society of Farm Work Research, too. His research focuses on the development and evaluation of sustainable, environmentally friendly production systems for both major crops and regional specialty crops, for example buckwheat (Fagopyrum esculentum Moench). The effects of farm work on the human mind is one of his important research objectives, too.

Abstract: The UN has defined seventeen sustainable development goals (SDGs) to provide a common blueprint for the continuation of human societies and the preservation of the world's ecosystems. Agriculture relates directly to SDG 2 (Zero Hunger) and is also related to the other SDGs to at least some extent. In addition to its core purpose of food production, agriculture affects many ecosystem services. For example, paddy fields can act as sources of clean water, prevent flooding, mitigate climate change, and help conserve biodiversity and at-risk ecosystems. Agriculture can also contribute to soil conservation, prevention of soil erosion, environmental conservation, and organic waste treatment. In addition, it reflects the local culture and facilitates its inheritance by younger generations as well as providing a space for people to interact with and enjoy the agricultural environment. Despite agriculture's fundamental importance for human survival, it is often poorly understood in modern societies; agricultural work may be disliked because it is considered physically strenuous. Promoting a better understanding of agriculture is a key educational objective of the Faculty of Agriculture. There is an elite junior and senior high school in central Tokyo, Japan that has maintained and managed paddy fields for over 70 years since its establishment. It was found that completing a course of field work on the process of paddy rice cultivation, from field making to harvesting, increased students' understanding of the importance of agriculture and helped to pass on the school's culture and traditions. Experience of agricultural work can also facilitate recovery from damaging conditions. This is exemplified by agricultural return to work program organized by the department of Psychiatry at the University of Tsukuba Hospital; day care center patients participating in this program reported that they found the experience enjoyable and that it strengthened their appreciation of life.

Plenary Speech 3: Study on the Gel Molecular Mechanism of Surimi-Based Products Based on The Interaction of Components

Prof. Xuepeng Li



College of Food Science and Engineering, Bohai University, China

Biography: Dr. Xue-peng Li is currently the Professor and Dean of the College of Food Science and Engineering, Bohai University; Director of the Institute of Storage and Processing of Aquatic Products, Institute of Aquatic Products

Research, Institute of Aquatic Products of the Food Science Research Institute, Director of Liaoning Agricultural Product Quality Safety Traceability Professional Technology Innovation Center. His research focuses on the processing and preservation of seafood, the utilization of seafood byproducts, surimi and surimi products. The discovery of seafood proteins and peptides is one of his important research objectives, too. More than 80 high quality papers in related field were published, among which 2 papers were selected as highly cited papers in ESI and 2 papers were selected as leading papers in F5000. He also works as the committee member and reviewers of more than 20 journals like Food Science, Food Industry Technology, Future Food Science, Food Chemistry, Journal of Agricultural and Food Chemistry etc.

Abstract: Gel properties are one of the important determining factors for the quality and sensory properties of surimi products. Surimi product is a typical multi-phase, multi-component food system. The interaction between the main components such as proteins, polysaccharides and lipids is the basis for the formation of surimi and ultimately determines the quality of the products. However, the interaction mechanism between the multiple components in the surimi mixed system and its effect on the quality of surimi products are still unclear. This constrains the processing technology, theoretical innovation and the healthy development of the industry for surimi products. In this study, the effects of exogenous additives such as proteins, polysaccharides, lipids and polyphenols on the thermally induced gelation properties of surimi are reviewed based on the formation mechanism and influencing factors of surimi gels. The purpose is to analyze the interaction between the components in surimi products and their application in surimi production. In this way, we provide theoretical basis and reference for the development of new surimi products and the regulation of gel quality.

Plenary Speech 4: Electrochemical Strategies for Food Additives Sensing



Prof. Hassan Karimi-Maleh

School of Resources and Environment, University of Electronics Science and Technology of China, China; Department of Chemical Engineering and Energy, Laboratory of Nanotechnology, Quchan University of Technology, Iran; Department of Applied Chemistry, University of Johannesburg, South Africa

Biography: Hassan Karimi-Maleh works as professor in the School of Resource and Environment, University of Electronics Science and Technology of China (UESTC). He is a highly cited researcher selected by clarivate analytics 2018 (cross-filed), 2019 (Agriculture field) and 2020 (cross-filed) and Top 1% Scientists in Chemistry and Agriculture simultaneously in ISI Essential Science Indicators. He has published more than 250 research papers with more than 15000 citations and H-index 77 and he works as editorial board of more than 20 international journals such as Ecotoxicology and Environmental Safety (Elsevier, IF 4.527), journal of food measurement and characterization and etc. He also works as adjunct Professor in University of Johannesburg, South Africa and Quchan University of Technology, Quchan, Iran. His research interest includes development of chemically modified electrodes and DNA sensors for food, biological, pharmaceutical and environmental compounds analysis and investigation of electrochemistry behavior of electroactive materials such as polymers, organic and inorganic compounds. Recently, he focused on synthesis of nanomaterials and application of them in drug delivery and energy storage fields.

Abstract: Analysis of food compounds is an inevitable issue to evaluate quality of the compounds used in human life. Quality of drinking water and food products is directly associated with human health. Presence of for bidden additives in food products and toxic compounds in water samples with low quality lead to important problems for human health. Therefore, attention to analytical strategy for investigation of quality of food and water compounds and monitoring presence of forbidden compounds in materials used by humans has increased in recent years. Analytical methods help to identify and quantify both permissible and unauthorized compounds present in the materials used in human daily life. Among analytical methods, electrochemical methods have been shown to have more advantages compared to other analytical methods due to their portability and low cost. Most of big companies have applied this type of analytical methods because of their fast and selective analysis. Due to simple operation and high diversity of electroanalytical sensors, these types of sensors are expected to be the future generation of analytical systems. Therefore, many scientists and researchers have focused on designing and fabrication of electroanalytical sensors with good selectivity and high sensitivity for different types of compounds such as food products. In this presentation, we described the mechanism and different examples of DNA, enzymatic and electro-catalytic methods for electroanalytical determination of food compounds.

Part III Oral Presentations

Online Oral Presentation Guidelines

- ↓ Online Oral Presentation will be conducted via Microsoft Teams Meeting.
- All presenters are requested to reach the Online Session Room prior to the schedule time and complete their presentation on time.
- **4** All presentation times are shown in China Standard Time (GMT+8:00).
- ♣ If a presenter is not able to show up via Teams, the session chair / conference secretary will play the pre-recorded video presentation during his/her scheduled presentation time, if listeners have questions about the presentation, please contact the conference secretary to forward the questions.
- If a presenter cannot show up on time or have problem with internet connection, the session chair has the right to rearrange his/her presentation, and let the next presentation start.
- Signed and stamped electronic presentation certificate would be issued via e-mail after presentation.

Best Oral Presentations Selection

The session chair will select one best presentations from his/her session based on the following criteria:

- ✓ Research Quality
- ✓ Presentation Performance
- ✓ Presentation Language
- ✓ PowerPoint Design
- ✓ Effective Communications

Best Oral Presentations Award

The Best Oral Presenter from each session will receive an official certificate and a free registration to the ABS/ABB2022.

Session 5_ Biological Science and Applied Biotechnology

<u>Session Time: 14:00-18:15</u> <u>August 10th, 2021</u> <u>China Standard Time (UTC/GMT+8:00)</u> Session Room Link: <u>http://www.academicconf.com/teamslink?confname=ABB2021</u> Session Chair: Dr. Lidia Nicola, University of Pavia, Italy

14:00-14:15	ABB1222	Discovery of bioactive peptides and protein hydrolysates with health-promoting potential Dr. Tsun-Thai Chai, Universiti Tunku Abdul Rahman, Malaysia
14:15-14:30	ABB1225	Amberinone, a new guaianolide from Amberboa ramosa Dr. Muhammad Ilbrahim, University of Karachi, Pakistan
14:30-14:45	ABS3673	Application and research of microporous spectrophotometer in breaking the sporoderm of Ganoderma lucidum spores by enzymatic hydrolysis combined with physical actuation <i>Prof. Yan Liu, Shanghai Jiaotong University, China</i>
14:45-15:00	ABB1194	Bioactivity aspect of the Keggin-type heteropoly compounds in bulk and composites Prof. Snezana Uskokovic-Markovic, University of Belgrade, Serbia
15:00-15:15	ABB1173	New developments of an old technique: micropipette aspiration Assoc. Prof. Gustavo Plaza, Universidad Politécnica de Madrid, Spain
15:15-15:30	ABS3306	Prospecting postharvest processing of agricultural and social forest products at Gerlang Village, Central Java Dr. Stalis Norma Ethica, Universitas Muhammadiyah Semarang, Indonesia
15:30-15:45	ABB1209	Deciphering carbohydrate metabolism through a genotype- phenotype association study of 56 lactic acid bacteria genomes Dr. Gemma Buron Moles, Toulouse Biotechnology Institute, France
15:45-16:00		BREAK
16:00-16:20	ABB1232 (Invited)	Cell instructive liquid crystalline networks for myotube formation Dr. Camilla Parmeggiani, University of Florence, Italy
16:20-16:35	ABB1203	Cap-binding signatures in trypanosomatid eIF4Es Dr. Supratik Das, Translational Health Science and Technology Institute, India
16:35-16:55	ABB1255 (Invited)	Diversity-oriented synthesis of sp3-rich molecular scaffolds as a tool for chemical genetics <i>Prof. Andrea Trabocchi, University of Florence, Italy</i>
16:55-17:10	ABB1266	Integrated physiological and comparative proteomics analysis of xero-halophyte Atriplex reveals underlying salt stress tolerance mechanisms Dr. Shweta Jha, J.N.V. University, India

17:10-17:25	ABB1229	Plant natural products with anti-thyroid cancer activity Prof. Raffaele Pezzani, University of Padova, Italy
17:25-17:45	ABB1246 (Invited)	Evaluation of the potential of Trichoderma strains in the bioremediation of hydrocarbon complex mixtures Dr. Lidia Nicola, University of Pavia, Italy
17:45-18:00	ABB1178	Molecular mechanisms of fungicide-related abnormal sterols on membrane traffic Dr. Agustin Hernandez, Federal University of São Carlos, Brazil
18:00-18:15	ABB1213	Autonomoussystem tomanufacture3DprintedcatalyticmicroreactorsDr. Harrson Santana, University of Campinas, Brazil

Session 6_Agriculture, Pest Control, Climate Change and Sociology

<u>Session Time: 08:30-12:40</u> <u>August 11th, 2021</u> <u>China Standard Time (UTC/GMT+8:00)</u> Session Room Link: <u>http://www.academicconf.com/teamslink?confname=ABS2021</u> Session Chair: Associate Prof. Ruimin Fu, Henan Finance University, China

8:30-8:45	ABS3891	Evolutionary ecology of pests to Bt plants and insecticides: simulations of resistance evolution risk
		Dr. José Bruno Malaquias, UNESP IBB, Brazil
8:45-9:00	ABS3832	The relevance of taxonomy in agroecological studies on pests. The
		case of Oebalus species in Neotropical rice fields
		Dr. Daniela Fuentes, CECOAL-CONICET-UNNE, Argentina Ethical aspects related to the harvesting, of wild edible insects
9:00-9:15	ABS3874	Dr. Guiomar Melgar Lalanne, Universidad Veracruzana, Mexico
9:15-9:30	ABS3863	Market opportunities: satisfying consumer ee Dr. Herbert Stone, Zhejiang Gongshang University, China
	A D C 270 4	Use of precision agriculture technology to improve the estimation of
9:30-9:50	ABS3794 (Invited)	livestock greenhouse gas emissions
	(IIIvited)	Dr. Paul Cheng, The University of Melbourne, Australia
9:50-10:05	ABB1177	Precision biotechnology for tropical plant improvement
7.50 10.05	ADDII//	Assoc. Prof. Hoe-Han Goh, Universiti Kebangsaan Malaysia, Malaysia
	ABS3803	Vulnerability and efficiency of land productivity to unsuitable
10:05-10:20		climatic conditions
		Miss Ummu Marufah, IPB University, Indonesia
10:20-10:30		BREAK
10:20-10:30		BREAK Effects of integrated farming system and rainwater harvesting on
	AB\$3759	
10:20-10:30	ABS3759	Effects of integrated farming system and rainwater harvesting on
	ABS3759	Effects of integrated farming system and rainwater harvesting on livelihood improvement in North-Eastern region of India compared
	ABS3759	Effects of integrated farming system and rainwater harvesting on livelihood improvement in North-Eastern region of India compared to traditional shifting: evidence from an action research
	ABS3759 ABS3706	Effects of integrated farming system and rainwater harvesting on livelihood improvement in North-Eastern region of India compared to traditional shifting: evidence from an action research Dr. Sanjay Kumar Ray, ICAR Research Complex for NEH Region, India
10:30-10:45		Effects of integrated farming system and rainwater harvesting on livelihood improvement in North-Eastern region of India compared to traditional shifting: evidence from an action research <i>Dr. Sanjay Kumar Ray, ICAR Research Complex for NEH Region, India</i> To the dismay of the landlord, small mammal communities in
10:30-10:45		Effects of integrated farming system and rainwater harvesting on livelihood improvement in North-Eastern region of India compared to traditional shifting: evidence from an action research Dr. Sanjay Kumar Ray, ICAR Research Complex for NEH Region, India To the dismay of the landlord, small mammal communities in orchards and homesteads
10:30-10:45 10:45-11:00	ABS3706	Effects of integrated farming system and rainwater harvesting on livelihood improvement in North-Eastern region of India compared to traditional shifting: evidence from an action research Dr. Sanjay Kumar Ray, ICAR Research Complex for NEH Region, India To the dismay of the landlord, small mammal communities in orchards and homesteads Dr. Linas Balčiauskas, Nature Research Centre, Lithuania
10:30-10:45	ABS3706 ABS3688	Effects of integrated farming system and rainwater harvesting on livelihood improvement in North-Eastern region of India compared to traditional shifting: evidence from an action research Dr. Sanjay Kumar Ray, ICAR Research Complex for NEH Region, India To the dismay of the landlord, small mammal communities in orchards and homesteads Dr. Linas Balčiauskas, Nature Research Centre, Lithuania SQual4Agri, a hybrid and multidimensional conceptual model as a step toward improvement in small family based agricultural organization.
10:30-10:45 10:45-11:00	ABS3706	Effects of integrated farming system and rainwater harvesting on livelihood improvement in North-Eastern region of India compared to traditional shifting: evidence from an action research Dr. Sanjay Kumar Ray, ICAR Research Complex for NEH Region, India To the dismay of the landlord, small mammal communities in orchards and homesteads Dr. Linas Balčiauskas, Nature Research Centre, Lithuania SQual4Agri, a hybrid and multidimensional conceptual model as a step toward improvement in small family based agricultural organization. Prof. Margarida Saraiva, University of Évora and BRU-UNIDE/ISCTE-IUL,
10:30-10:45 10:45-11:00	ABS3706 ABS3688	Effects of integrated farming system and rainwater harvesting on livelihood improvement in North-Eastern region of India compared to traditional shifting: evidence from an action research Dr. Sanjay Kumar Ray, ICAR Research Complex for NEH Region, India To the dismay of the landlord, small mammal communities in orchards and homesteads Dr. Linas Balčiauskas, Nature Research Centre, Lithuania SQual4Agri, a hybrid and multidimensional conceptual model as a step toward improvement in small family based agricultural organization. Prof. Margarida Saraiva, University of Évora and BRU-UNIDE/ISCTE-IUL, Portugal
10:30-10:45 10:45-11:00	ABS3706 ABS3688	Effects of integrated farming system and rainwater harvesting on livelihood improvement in North-Eastern region of India compared to traditional shifting: evidence from an action research Dr. Sanjay Kumar Ray, ICAR Research Complex for NEH Region, India To the dismay of the landlord, small mammal communities in orchards and homesteads Dr. Linas Balčiauskas, Nature Research Centre, Lithuania SQual4Agri, a hybrid and multidimensional conceptual model as a step toward improvement in small family based agricultural organization. Prof. Margarida Saraiva, University of Évora and BRU-UNIDE/ISCTE-IUL, Portugal
10:30-10:45 10:45-11:00 11:00-11:20	ABS3706 ABS3688 (Invited)	 Effects of integrated farming system and rainwater harvesting on livelihood improvement in North-Eastern region of India compared to traditional shifting: evidence from an action research <i>Dr. Sanjay Kumar Ray, ICAR Research Complex for NEH Region, India</i> To the dismay of the landlord, small mammal communities in orchards and homesteads <i>Dr. Linas Balčiauskas, Nature Research Centre, Lithuania</i> SQual4Agri, a hybrid and multidimensional conceptual model as a step toward improvement in small family based agricultural organization. <i>Prof. Margarida Saraiva, University of Évora and BRU-UNIDE/ISCTE-IUL, Portugal</i> Farm-household innovation in a changing policy world <i>Dr. Terry McFadden, University College Dublin, Ireland</i>
10:30-10:45 10:45-11:00 11:00-11:20	ABS3706 ABS3688 (Invited)	Effects of integrated farming system and rainwater harvesting on livelihood improvement in North-Eastern region of India compared to traditional shifting: evidence from an action research Dr. Sanjay Kumar Ray, ICAR Research Complex for NEH Region, India To the dismay of the landlord, small mammal communities in orchards and homesteads Dr. Linas Balčiauskas, Nature Research Centre, Lithuania SQual4Agri, a hybrid and multidimensional conceptual model as a step toward improvement in small family based agricultural organization. Prof. Margarida Saraiva, University of Évora and BRU-UNIDE/ISCTE-IUL, Portugal

11:50-12:10	ABB1169 (Invited)	SABANA project: Demonstrating the application of microalgae in agriculture and aquaculture Dr. Gabriel Acien, University of Almería, Spain
12:10-12:25	ABS3805	Symbiotic performance and seed yield of four cowpea (Vigna unguiculata L. Walp) varieties in response to Brdyrhizobium inoculation under field conditions in the tropical environment Dr. Tewodros Ayalew, Hawassa University, Ethiopia
12:25-12:40	ABS3724	Genetically modified crops: current status and future prospects Dr. Krishan Kumar, ICAR - Indian Institute of Maize Research, India

Part V Acknowledgements

On behalf of the ABS/ABB 2021 Organizing Committee, we would like to take this opportunity to express our sincere gratitude to our participants. Without their support and contributions, we would not be able to hold the conference successfully in this special year. We would also like to express our acknowledgements to the Technical Program Committee members who have given their professional guidance and valuable advice as reviewers. Below are the lists of the Technical Program Committee members. For those who contribute to the success of the conference organization without listing the name here, we would love to say thanks as well.

Technical Program Committee

Conference Chair

Prof. Jianrong Li, College of Food Science and Engineering, Bohai University, China

Local Committee Chair

Prof. Xuepeng Li, College of Food Science and Engineering, Bohai University, China

Local Committee Co-Chair

Prof. Xuqiao Feng, College of Food Science and Engineering, Bohai University, China

Local Committee Members

Prof. He Liu, College of Food Science and Engineering, Bohai University, China Prof. Dengyong Liu, College of Food Science and Engineering, Bohai University, China Prof. Shumin Yi, College of Food Science and Engineering, Bohai University, China Prof. Yonghong Ge, College of Food Science and Engineering, Bohai University, China Prof. Tong sun, College of Food Science and Engineering, Bohai University, China

ABS 2021 Chair of Technical Program Committee

Prof. Hisayoshi Hayashi, University of Tsukuba, Japan Prof. Xuqiao Feng, College of Food Science and Engineering, Bohai University; Institute for Science and Technology of Fruits and Vegetables, China

ABS 2021 Technical Program Committee

Prof. Moniruzzaman Khondker, University of Dhaka, Bangladesh
Prof. Vilai Rungsardthong, King Mongkut's University of Technology North Bangkok, Thailand
Prof. Wenqiao Yuan, North Carolina State University, USA
Prof. Hui WANG, Tsinghua University, China
Prof. Mikihisa Umehara, Graduate School of Life Sciences, Toyo University, Japan
Prof. Vítor João Pereira Domingues Martinho, Polytechnic Institute of Viseu, Portugal
Prof. Eli Cohen, Ben-Gurion University of the Negev, Israel
Prof. Tomasz Lesiow, Wroclaw University of Economics, Poland
Prof. Anas Sarwar Qureshi, University of Agriculture Faisalabad, Pakistan
Prof. Bal Ram Singh, Norwegian University of Life Sciences, Norway
Prof. Hak-Ryul Kim, Kyungpook National University, Korea

Prof. Nabil Omar, Soils, Water and Environment Research Institute, Egypt Prof. Abd El-Rahman Abd El-Raouf AHMED, Agricultural Engineering Research Institute, Egypt Prof. Maria Luisa da Silva, Federal University of Pará State, Brazil Prof. Job Nmadu, Federal University of Technology, Nigeria Prof. Algirdas Jasinskas, Vytautas Magnus University Agriculture Academy, Lithuania Prof. Md. Abdul Karim, University of Dhaka, Bangladesh Prof. Joao Simoes, University of Trásos-Montese Alto Douro, Portugal Prof. Liping Xu, Nantong Institute Technology, China Prof. Muhammad Ovais Omer, University of Veterinary and Animal Sciences, Pakistan Prof. Bhumi Nath Tripathi, Indira Gandhi National Tribal University, India Assoc. Prof. Cristian Popscu, University of Pitesti, Romania Assoc. Prof. Bangun Nusantoro, Gadjah Mada University, Indonesia Assoc. Prof. Khim Phin Chong, Universiti Malaysia Sabah, Malaysia Assist. Prof. Narong Touch, Tokyo University of Agriculture, Japan Assist. Prof. Izabela Michalak, Wrocław University of Science and Technology, Poland Dr. Janyawat T. Vuthijumnonk, Rajamangala University of Technology Lanna, Thailand Rozina Khanam, Researcher, Bangladesh University of Professionals, Bangladesh Dr. Amaresh Chandra, ICAR-Indian Institute of Sugarcane Research, India Dr. Ádina L. Santana, University of Campinas, Campinas, Brazil Dr. Amit Kumar Pandey, Rajasthan University of Veterinary and Animal Sciences, India Dr. Corina Carranca, National Institute of Agricultural Research and Veterinary, Portugal Dr. Aurelija Rudzianskaite, Aleksandras Stulginskis University, Lithuania Dr. Paul (Long) Cheng, The University of Melbourne, Australia

Dr. Claudio Frezza, Sapienza University of Rome, Italy

ABB2021 Technical Program Committee:

Prof. Ani Idris, Universiti Teknologi, Malaysia Prof. Young Shik Park, Inje University, Korea Prof. Richard Daniellou, University of Orléans, France Prof. Mohamed Chiban, Ibn Zohr University, Morocco Prof. Alberto Mannu, Leibniz Institute for Catalysis, Germany Prof. Siva Ramamoorthy, Vellore Institute of Technology, India Prof. Majekodunmi O. Fatope, Sultan Qaboos University, Oman Prof. Zhongming Fang, Wuhan Institute of Bioengineering, China Prof. Pongsak Rattanachaikunsopon, Ubon Ratchathani University, Thailand Prof. Toshifumi Tsukahara, Japan Advanced Institute of Science and Technology, Japan Prof. Amany M. A. El-Sikaily, National Institute of Oceanography & Fisheries (NIOF), Egypt Prof. Bhumi Nath Tripathi, Indira Gandhi National Tribal University, India Assoc. Prof. Younes Mooussaoui, University of Gafsa, Tunisia Assoc. Prof. Xingjun Li, Academy of the State Administration of Grains, China Assoc. Prof. Alexander D. Kroumov, Bulgarian Academy of Sciences, Bulgaria Assist. Prof. Serena Massari, University of Perugia, Italy Dr. Shuo Lu, University of Texas Medical School, USA Dr. Ricardo Lagoa, ESTG-Polytechnic Institute of Leiria, Portugal Liuqing Wen, Georgia State University, USA Cristina Peixoto, Downstream Processes Lab, Portugal