

MINISTRY OF AGRICULTURE RUSSIAN FEDERATION
FAR EASTERN STATE AGRARIAN UNIVERSITY
HARBIN LESHI AGRICULTURAL TECHNOLOGY CO., LTD
VITEBSK STATE ACADEMY OF VETERINARY MEDICINE



ECOLOGICAL AND BIOLOGICAL WELL-BEING OF FLORA AND FAUNA

*Schedule of International Conference
(Blagoveshchensk, October 20–21, 2022)*

**Blagoveshchensk
Far Eastern State Agrarian University
2022**

The composition of the Organizing Committee of the Conference:

Chairman:

Pavel V. Tikhonchuk, Dr. Agr. Sci., Professor, Rector of the Far Eastern State Agrarian University

Vice Chairman:

Naumenko Alexander Valerievich, Dr. Agr., Vice President of Scientific Work of Far East National Agricultural University

Members of the Organizing Committee:

Zhang Bixian, Dr. Agr. Sci., Professor, Director of the Soybean Research Institute, Heilongjiang Academy of Agricultural Sciences, People's Republic of China;

Li Yuting, General Director, Harbin Agricultural Scientific and Technical Company "LESHI", People's Republic of China;

Li Hongpeng, Dr. Agr. Sci., Senior Researcher, Heilongjiang Academy of Agricultural Sciences, China;

Nikolay I. Gavrichenko, Dr. Agr. Sci., Professor, Rector of the Vitebsk State Academy of Veterinary Medicine, Republic of Belarus;

Alexander A. Belko, Cand. Veterinar. Sci., Associate Professor, Vice-Rector for Scientific Work, Vitebsk State Academy of Veterinary Medicine, Republic of Belarus;

Elena A. Gartovannaya, Cand. Tech. Sci., Associate Professor of the Department of Agricultural Processing Technology, Far Eastern State Agrarian University;

Elena B. Zakharova, Dr. Agr. Sci., Professor of the Department of General Agriculture and Plant Growing, Far Eastern State Agrarian University;

Marina V. Makannikova, Cand. Agr. Sci., Head of the Department of Geodesy and Land Management, Far Eastern State Agrarian University;

Antonina P. Pakusina, Dr. Chem. Sci., Professor of the Department of Chemistry, Far Eastern State Agrarian University;

Natalya V. Trush, Dr. Biol. Sci., Associate Professor, Head of the Department of Biology and Hunting, Far Eastern State Agrarian University;

Roini L. Sharvadze, Dr. Agr. Sci., Professor, Dean of the Faculty of Veterinary Medicine, Zootechnics and Biotechnologies, Far Eastern State Agrarian University.

Meeting schedule

October 20, 2022

13:00 – 14:00 (Local Time)

7:00 – 8:00 (Moscow Time)

12:00 – 13:00 (Beijing Time)

Opening of the meeting. Plenary meeting.

October 20-21, 2022

14:00(Local Time)

8:00 (Moscow Time)

13:00 (Beijing Time)

Group meetings.

Rules of Meeting:

- | | |
|--|---------------------|
| Plenary report | - Up to 15 minutes; |
| Group report | - Up to 10 minutes; |
| From 14:00 p.m | - Group meetings; |
| Presentation and discussion of report problems | - Up to 5 minutes. |

0.PLENARY MEETING

Auditorium 100 (1 floor)

Opening of the meeting:

Pavel V. Tikhonchuk, Rector of the Far Eastern State Agrarian University

Welcome Message

Naumenko Alexander Valerievich, Vice President of Scientific Work of Far East National Agricultural University

Report:

1. Monitoring of the population of the Oriental Stork on the Zeya-Bureya Plain of the Amur region

Anton A. Sasin, Candidate of Biological Sciences, Associate Professor Far Eastern State Agrarian University, Amur region, Blagoveshchensk, Russia

2. Characterization of African swine fever viruses isolated in China

Dongming Zhao, PhD, Professor, Executive Chief Scientist of Zoonoses and Exotic Diseases State Key Laboratory of Veterinary Biotechnology
Harbin Veterinary Research Institute ,Chinese Academy of Agricultural Sciences,
People's Republic of China

3. Isolation of SARS-CoV-2 and COVID-19 symptom complex in various animal species

*Irina A. Subbotina*¹, Candidate of Veterinary Sciences, Associate Professor
Vitebsk State Academy of Veterinary Medicine, Vitebsk, Republic of Belarus

2. MONITORING AND EVALUATION OF NATURAL ECOSYSTEMS

14:00 from October 20 to 21, Hall 15 (16th floor)

Chairman: Antonina P. Pakusina

Secretary: Piretskaya Olga Andreevna

1. Pollution of St. Petersburg ponds with household and recreational waste

Natalia A. Baburina, Senior Lecturer

Irina I. Mirzakaeva, Student

Saint Petersburg State University of Veterinary Medicine, Saint Petersburg, Russia

2. Assessment of the state of the ecosystem of Nazimov Spit

Daria I. Volkova, Assistant

Irina A. Lisina, Candidate of Geographical Sciences, Associate Professor

Peter F. Brovko, Doctor of Geographical Sciences, Professor

Lyubov N. Vasilevskaya, Candidate of Geographical Sciences, Associate Professor

Nadezhda G. Kotovich, Head of the Laboratory

Far Eastern Federal University, Primorsky krai, Vladivostok, Russia

3. Research advances of entomopathogenic nematodes as biocontrol agents in China

Chunjie Li, Doctor of Agricultural Sciences, Professor

Congli Wang, Doctor of Agricultural Sciences, Professor

Doudou Chang, Postgraduate Student

Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Harbin, China

4. The influence of climatic changes on the mollusks of the Primorsky scallop in the marine farms of the Primorsky krai (Posyet Bay, Sea of Japan)

Larisa A. Gayko, Candidate of Geographical Sciences, Associate Professor

Pacific Oceanological Institute named after V. I. Ilyichev of the Far Eastern Branch of the Russian Academy of Sciences, Primorsky krai, Vladivostok, Russia

Far Eastern State Technical Fisheries University, Primorsky krai, Vladivostok, Russia

5. Assessment of changes in the content of toxic and biologically active elements in Gray mussel (*Crenomytilus grayanus*) from certain areas of Peter the Great Bay

Lidiya T. Kovekovdova, Doctor of Biological Sciences, Professor

Aleca A.-O. Sat, Student

Far Eastern Federal University, Primorsky krai, Vladivostok, Russia

6. Influence of typhoon HINNAMNOR on flood development in Primorsky krai

Irina A. Lisina, Candidate of Geographical Sciences, Associate Professor

Vladimir V. Krokhin, Candidate of Geographical Sciences, Senior Researcher

Nadezhda G. Kotovich, Head of the Laboratory

Lyubov N. Vasilevskaya, Candidate of Geographical Sciences, Associate Professor

Daria I. Volkova, Assistant

Far Eastern Federal University, Primorsky krai, Vladivostok, Russia

Far Eastern Regional Research Hydrometeorological Institute, Primorsky krai, Vladivostok, Russia

7. Monitoring and assessment of the passage of high water and floods in the Amur region

Tatyana G. Molchanova, Candidate of Agricultural Sciences, Associate Professor

Natalya S. Shelkovkina, Candidate of Agricultural Sciences, Associate Professor

Elena A. Grebenschikova, Candidate of Biological Sciences, Associate Professor

Irina V. Bibik, Candidate of Technical Sciences, Associate Professor

Svetlana N. Lylyk, Candidate of Agricultural Sciences, Associate Professor

Natalya A. Gorbacheva, Senior Lecturer

Aleksey A. Rozovik, Deputy Head of the Water Resources Department

Far Eastern State Agrarian University, Amur region, Blagoveshchensk, Russia

Amur Basin Water Administration in the Amur region, Amur region, Blagoveshchensk, Russia

8. Monitoring of cereal septorioses and identification methods

Lyudmila A. Sviridova, Candidate of Biological Sciences, Associate Professor

Irina P. Moskalik, Master's Degree Student

Russian State Agrarian University – Moscow Timiryazev Agricultural Academy, Moscow, Russia

9. Ecological assessment of the habitats of the Oriental Stork in the south of the Zeysko-Bureinskaya Plain, Russia

Antonina P. Pakusina, Doctor of Chemical Sciences, Professor

Anton A. Sasin, Candidate of Biological Sciences, Associate Professor

Nikita V. Malinovsky, Postgraduate Student

Tatiana P. Platonova, Candidate of Chemical Sciences, Associate Professor

Far Eastern State Agrarian University, Amur region, Blagoveshchensk, Russia

Amur State University, Amur region, Blagoveshchensk, Russia

10. Gross chemical composition of soils of the emerging technogenic catena (on the example of the dump of the Pavlovsky coal mine, Primorsky krai)

Oleg V. Polokhin, Candidate of Biological Sciences

Federal Scientific Center for Biodiversity of the East Asia Terrestrial Biodiversity of the Far Eastern Branch of the Russian Academy of Sciences, Primorsky krai, Vladivostok, Russia

11. Possibilities of studying the influence of agriculture on the dynamics of changes in the number of rare crane species in the Muravyevsky Park and Muravyevsky Reserve

Sergey K. Ryndov, Master of Environmental Sciences

Muravyevsky Park of Sustainable Nature Management, Amur region, Tambov district, Russia

12. Status of benthic invertebrate communities and assessment of the water quality of the Silinka River (Lower Amur)

Nadezhda M. Yavorskaya, Senior Researcher

Institute of Water and Environmental Problems of the Far Eastern Branch of the Russian Academy of Sciences, Khabarovsk krai, Khabarovsk, Russia

Federal State Budgetary Institution «Zapovednoe Priamurye», Khabarovsk krai, Khabarovsk, Russia

5. BIOLOGIZATION OF CROP PRODUCTION

14:00 from October 20 to 21, auditorium 31 (2nd floor)

Chairman: Elena Zaharova

Secretary: Natalia Vladimirovna Litus

1. Biologization of ware potato production technology by introduction of sideral crops into crop rotation (in the conditions of the northern forest-steppe of the Ob region)

Ekaterina V. Biktimirova, Senior Lecturer, Applicant

Elena M. Shaldyaeva, Doctor of Biological Sciences, Professor

Yulia V. Pilipova, Doctor of Agricultural Sciences, Associate Professor

Novosibirsk State Agricultural University, Novosibirsk region, Novosibirsk, Russia

2. Evaluation of collection varieties of peas (*Pisum Sativum* L.) by morphotype in the conditions of the Non-Chernozem region

Elena A. Vertikova, Doctor of Agricultural Sciences, Associate Professor

Anton A. Derevianko, Student

RGAU – Moscow Agricultural Academy named after K. A. Timiryazev, Moscow, Russia

3. Multi-parasitism: a promising approach to simultaneously produce *Trichogramma chilonis* and *T. dendrolimi* eggs on *Antheraea pernyi*

Junjie Zhang, Xue Zhang, Wenmei Du, Ying Hu, Changchun Ruan, Yuting Li, Yiqian Ma

Jilin Agricultural University, Jilin, China

Harbin LESHU Agricultural Technology Co., Ltd, Harbin, China

4. Influence of rape, rye and brome mowing in strip crops on mulch and soybean yield in the Amur region

Viktor V. Epifantsev, Doctor of Agricultural Sciences, Professor

Alexander N. Panasyuk, Doctor of Technical Sciences, Corresponding Member of the Russian Academy of Sciences

Far Eastern State Agrarian University, Amur region, Blagoveshchensk, Russia

5. Biological effectiveness of herbicides against a complex of weeds in soybean crops in the Amur region

Elena B. Zakharova, Doctor of Agricultural Sciences, Associate Professor

Alexey A. Nemykin, Candidate of Agricultural Sciences, Associate Professor

Pavel V. Tikhonchuk, Doctor of Agricultural Sciences, Professor

Far Eastern State Agrarian University, Amur region, Blagoveshchensk, Russia

6. The effect of a multifunctional biological product with micro fertilizers on the yield of spring durum wheat in the forest-steppe of the Middle Volga region

Sergey N. Zudilin, Doctor of Agricultural Sciences, Professor

Oleg A. Olenin, Candidate of Agricultural Sciences

Anna Yu. Vasilisko, Postgraduate Student

Samara State Agrarian University, Samara region, Kinel, Russia

7. Growth stimulator Lariksin in the cultivation of buckwheat in the southern agricultural zone of the Amur Region

*Elvira V. Timoshenko, Candidate of Agricultural Sciences, Associate Professor
Far Eastern State Agrarian University, Blagoveshchensk*

8. The effect of pre-sowing seed grazing with micro fertilizers on the yield of winter wheat in the forest-steppe of the Middle Volga region

Sergey N. Zudilin, Doctor of Agricultural Sciences, Professor

Oleg A. Olenin, Candidate of Agricultural Sciences

Andrey S. Zudilin, Postgraduate Student

Samara State Agrarian University, Samara region, Kinel, Russia

Ulyanovsk State Agrarian University named after P. A. Stolypin

Ulyanovsk region, Ulyanovsk, Russia

9. Evaluation of the effect of oat siderate on the properties of alluvial meadow soil and soybean yield

Alexander V. Naumenko, Candidate of Agricultural Sciences

Yulia V. Oborskaya, Candidate of Agricultural Sciences, Associate Professor

Maxim Yu. Shelikhan, Postgraduate Student

Far Eastern State Agrarian University, Amur region, Blagoveshchensk

10. Prospects of soybean production for grain in Western Siberia

Rinat R. Galeev, Doctor of Agricultural Sciences, Professor

Dmitry D. Petrov, Postgraduate Student

Anton E. Smirnov, Postgraduate Student

Evgeniy V. Ryadsky, Postgraduate Student

Novosibirsk State Agrarian University, Novosibirsk region, Novosibirsk, Russia

11. Assessment of agroecological state of arable soils of the Oktyabrsky district of the Amur region

Zhanna M. Karegina, Candidate of Agricultural Sciences

Tatiana P. Kolesnikova, Candidate of Biological Sciences

Marina F. Tsarkova, Candidate of Biological Sciences, Associate Professor

Alexander V. Naumenko, Candidate of Agricultural Sciences

Far Eastern State Agrarian University, Amur region, Blagoveshchensk, Russia

12. Growth and development of spring triticale plants at different sowing dates

Alexey A. Muratov, Candidate of Agricultural Sciences, Associate Professor

Evgeniya V. Tuaeva, Doctor of Agricultural Sciences, Associate Professor

Far Eastern State Agrarian University, Amur region, Blagoveshchensk

6. INDUSTRIAL ECOLOGY AND BIOTECHNOLOGY OF FOOD PRODUCTION

14:00 from October 20 to 21, auditorium 204 (1st floor)

Chairman: Elena A. Gartovannaya

Secretary: Anna V. Ermolaeva

1. Development of technology and recipe of cupcakes using biologically active substances from plant sources

Ketevan R. Babukhadiya, Doctor of Agricultural Sciences, Professor

Oksana V. Kalinina, Master's Degree Student

Far Eastern State Agrarian University, Blagoveshchensk, Russia

2. *Lactobacillus helveticus* KLDS 1.8701: an anti-allergic mechanisms of a postbiotic alternative strain

Peng Du, Doctor of Food Sciences, Associate Professor, Department Chair

Key Laboratory of Dairy Science, College of Food Science

3. Interaction of polyphenols and probiotics: bioavailability, function and application

Chun Li, Doctor of Food Science, Professor

Key Laboratory of Dairy Science, College of Food Science

Northeast Agricultural University, Harbin, China

Heilongjiang Green Food Science Research Institute, Harbin, China

4. Traditional fermented soybean products: processing, flavor formation, nutritional and biological activities

Libo Liu, Doctor of Food Science, Professor

Key Laboratory of Dairy Science, College of Food Science

5. An integrated approach to the use of wild berries of the region in the food industry

Elena A. Gartovannaya, Candidate of Technical Sciences, Associate Professor

Anna V. Ermolaeva, Candidate of Technical Sciences, Associate Professor

Tatiana V. Matveeva, Postgraduate Student

Vyacheslav L. Golub, Postgraduate Student

Far Eastern State Agrarian University, Blagoveshchensk, Russia

6. Application of breeding zoned varieties of spring wheat in food technologies

Elena A. Gartovannaya, Candidate of Technical Sciences, Associate Professor

Anna V. Ermolaeva, Candidate of Technical Sciences, Associate Professor

Far Eastern State Agrarian University, Blagoveshchensk, Russia

7. Prospects for the creation of meat-growing pasty products of specified composition and properties

Oksana V. Goncharuk, Candidate of Technical Sciences, Associate Professor

Alexey I. Goncharuk, Candidate of Technical Sciences, Associate Professor

Far Eastern State Agrarian University, Blagoveshchensk, Russia

8. The use of denatured whey proteins in functional foods

Yulia I. Derzhapolskaya, Candidate of Technical Sciences, Associate Professor

Elisabeta A. Varosyan, Master's Degree Student

Far Eastern State Agrarian University, Blagoveshchensk, Russia

9. Study of the nutritional and biological value of freshwater fish of the Amur region water basin in order to develop multicomponent food systems

Yulia I. Derzhapolskaya, Candidate of Technical Sciences, Associate Professor

Svetlana L. Gribanova, Candidate of Technical Sciences

Far Eastern State Agrarian University, Blagoveshchensk, Russia

10. Development of technology for gingerbread products enriched with raw materials of the Far Eastern region

Svetlana A. Kostrykina¹, Candidate of Technical Sciences, Associate Professor

Elena Yu. Osipenko², Candidate of Biological Sciences, Associate Professor

1, 2 Far Eastern State Agrarian University, Amur region, Blagoveshchensk, Russia

11. Assessment of environmental safety and quality of honey with the help of wax moth *Galleria mellonella* L.

Anna A. Krugovykh, Master's Degree Student

Vladislava S. Maslennikova, Researcher

Novosibirsk State Agrarian University, Novosibirsk region, Novosibirsk, Russia

12. Sustainable biotechnologies of carotenoid extraction from plant raw materials

Alexander A. Platitsyn

Anna S. Mustafina, Candidate of Technical Sciences, Associate Professor

Igor A. Bakin, Doctor of Technical Sciences, Professor

LLC AltayPlod, Altai krai, Biysk, Russia

Kemerovo State University, Kemerovo region, Kemerovo, Russia

Kuzbass State Agricultural Academy, Kemerovo region, Kemerovo, Russia

13. Bakery products as a basis for the production of functional food

Vladimir G. Popov, Doctor of Technical Sciences, Professor

Lyudmila N. Burakova, Candidate of Technical Sciences

Daniil A. Plotnikov, Postgraduate Student

Tyumen Industrial University, Tyumen region, Tyumen, Russia

Ural State University of Economics, Sverdlovsk Region, Yekaterinburg, Russia

14. The effect of functional components on the quality of fermented milk drinks

Ekaterina I. Reshetnik, Doctor of Technical Sciences, Professor

Svetlana L. Gribanova, Candidate of Technical Sciences

Far Eastern State Agrarian University, Blagoveshchensk, Russia

15. Biotechnological potential of honeybee products

Irina Yu. Reznichenko, Doctor of Technical Sciences, Professor

Igor A. Bakin, Doctor of Technical Sciences, Professor

*Andrey S. Lyubimov, Postgraduate Student
Kuzbass State Agricultural Academy, Kemerovo region, Kemerovo, Russia*