Preface

Gulom Uzakov¹, Ivan Chudov², Arthur Gibadullin^{3*}, and Zariya Zalilova²

Abstract. Within the framework of the presented proceedings, the results of the conducted II International Conference on Current Issues of Breeding, Technology and Processing of Agricultural Crops, and Environment (CIBTA-II-2023).

We are pleased to present a collection of proceedings II International Conference on Current Issues of Breeding, Technology and Processing of Agricultural Crops, and Environment (CIBTA-II-2023), which took place on July 3-5, 2023 in Karshi Engineering and Economic Institute (Karshi, Uzbekistan) and Bashkir State Agrarian University (Ufa, Russia) and was dedicated to agricultural and ecology.

The conference was held with the aim of summarizing international experience in the development of the biology, breeding, technology, processing of agricultural crops and ecology, namely:

- The formation of prerequisites for the further development of breeding during the period of active development of microbiology and biotechnology;
- Development of scientific and creation of practical potential in order to formulate proposals for the introduction of science-intensive technologies in agriculture;
- Popularization of fundamental and applied research in the field of agriculture, biology, breeding and processing of agricultural products.

The topics of the conference were as follows:

- Selection, physiology and immunity of agricultural plants;
- Biotechnology and molecular research in crop production;
- Soil fertility and fertilization of agricultural plants;
- Processing of agricultural products;
- Innovative technologies for the cultivation of agricultural plants;
- Automation and information technology in agriculture;
- Development of the food industry;
- Economics and management in the agro-industrial complex;
- Ecology and protection of agricultural plants from harmful organisms;
- Ecology and environment protection;
- Conservation of biological diversity.

¹ Karshi Engineering and Economic Institute, Karshi, Uzbekistan

²Bashkir State Agrarian University, Ufa, Russia

³ National Research University "Moscow Power Engineering Institute", Moscow, Russia

^{*} Corresponding author: 11117899@mail.ru

The conference was attended by representatives of research, government and commercial organizations, as well as scientists from near and far abroad, namely, scientists from Russia, the Republic of Uzbekistan, the Republic of Tajikistan, the Republic of Azerbaijan, the Republic of Kazakhstan, the Republic of Armenia, China and other countries. During the conference, the participants discussed problems related to the biology, breeding, technology, processing of agricultural crops and ecology. Thus, the conference made it possible to formulate new scientific directions and recommendations for ensuring sustainable development, which can be useful to state and regional authorities, international and supranational organizations, the scientific and professional community.

Acknowledgments

The organizing committee of the conference expresses its gratitude to the staff of EDP Sciences, who helps to place the proceedings of scientific conferences in international journals and provide support for the publication of materials.

In addition, the organizing committee would like to thank the conference participants; reviewers and everyone who helped organize this conference and form the presented volume for publication in the BIO Web of Conferences.

International Program Committee II International Conference on Current Issues of Breeding, Technology and Processing of Agricultural Crops, and Environment (CIBTA-II-2023)

- 1. **Bazarov Orifjan** Candidate of Physical and Mathematical Sciences, Associate Professor, Rector of the Karshi Engineering-Economics Institute, Karshi, Republic of Uzbekistan:
- 2. Uzakov Gulom Doctor of Technical Sciences, Professor, Vice-Rector for Research and Innovation, Karshi Engineering-Economics Institute, Karshi, Republic of Uzbekistan;
- 3. **Gabitov Ildar** Doctor of Technical Sciences, Professor, Rector of the Bashkir State Agrarian University, Ufa, Russian Federation;
- 4. **Chudov Ivan** Doctor of Biological Sciences, Associate Professor, Vice-Rector of the Bashkir State Agrarian University, Ufa, Russian Federation;
- 5. **Zhipeng Huang** Doctor, University of Toledo, Toledo, USA;
- 6. **Gibadullin Arthur** Candidate of Sciences, National Research University "Moscow Power Engineering Institute", Moscow, Russian Federation;
- 7. **Kamenova Mazken** Doctor, Professor, University "TURAN-ASTANA", Astana, Kazakhstan;
- 8. **Orynbassarova Aizhan** PhD, Educational Institution "Alikhan Bokeikhan University", Semey, Kazakhstan;
- 9. **Firsov Yury** Candidate of Sciences, Prague Institute for Advanced Studies, Prague, Czech Republic;
- 10. **Zalilova Zariya** Candidate of Sciences, Associate Professor, Bashkir State Agrarian University, Ufa, Russian Federation;
- 11. **Łakomiak Aleksandra** Doctor, Wroclaw University of Economics and Business, Wroclaw, Poland;
- 12. **Tarun Chakravorty N** N Doctor, Visiting professor, Canadian University of Bangladesh (CUB), Dhaka, Bangladesh;
- 13. **Romanova Iraida** Doctor of Agricultural Sciences, Professor, Smolensk State Agricultural Academy, Smolensk, Russian Federation;
- 14. **Zaripova Mohira** Doctor of Technical Sciences, Professor, Tajik Technical University named after academician M.S. Osimi, Dushanbe, Republic of Tajikistan;
- 15. **Lopatkin Dmitry** Candidate of Sciences, Associate Professor, Russian University of Chemical Technology named after V.I. Mendeleev, Moscow, Russian Federation;
- 16. **Mudarisov Salavat** Doctor of Technical Sciences, Professor, Bashkir State Agrarian University, Ufa, Russian Federation;
- 17. **Khabirov Ilgiz** Doctor of Biological Sciences, Professor, Bashkir State Agrarian University, Ufa, Russian Federation;
- 18. **Gavrilyuk Artyom** Ph.D., Lomonosov Moscow State University, Moscow, Russian Federation:
- 19. **Britvina Valentina** PhD, Moscow Polytechnic University, Moscow, Russian Federation:
- 20. **Batanov Bakhytgalei** Doctor of Agricultural Sciences, Professor, Bashkir State Agrarian University, Ufa, Russian Federation;

- 21. **Mustafin Radik** Doctor of Agricultural Sciences, Associate Professor, Bashkir State Agrarian University, Ufa, Russian Federation;
- 22. **Zueva Anna Sergeyevna** Candidate of Sciences, Associate Professor, Financial University under the Government of the Russian Federation, Moscow, Russian Federation;
- 23. **Pyataeva Olga** Candidate of Sciences, Russian State Academy of Intellectual Property, Moscow, Russian Federation;
- 24. **Perskaya Victoria Vadimovna** Doctor of Sciences, Professor, Financial University under the Government of the Russian Federation, Moscow, Russian Federation;
- 25. **Kharitonova Natalia Anatolyevna** Doctor, Professor, Financial University under the Government of the Russian Federation, Moscow, Russian Federation;
- 26. **Kharitonova Ekaterina Nikolaevna** Doctor, Professor, Financial University under the Government of the Russian Federation, Moscow, Russian Federation;
- 27. **Zakhidov Romen Abdullaevich** Doctor of Technical Sciences, Professor, Academician of the Academy of Sciences of the Republic of Uzbekistan, Karshi Engineering-Economics Institute, Karshi, Republic of Uzbekistan;
- 28. **Urishev Boboraim** Doctor of Technical Sciences, Professor, Karshi Engineering-Economics Institute, Karshi, Republic of Uzbekistan;
- 29. **Mamatov Farmon Murtozevich** Doctor of Technical Sciences, Professor, Karshi Engineering-Economics Institute, Karshi, Republic of Uzbekistan;
- 30. **Shvetsova Olga** Candidate of Sciences, Korea University of Technology and Education, Cheonan, South Korea;
- 31. **Eshev Sobir Samatovich** Doctor of Technical Sciences, Professor, Karshi Engineering- Economics Institute, Karshi, Republic of Uzbekistan.

Organizing Committee

- 1. **Uzakov Gulom Norboevich** Doctor of Technical Sciences, Professor, Vice-Rector for Research and Innovation, Karshi Engineering-Economics Institute, Karshi, Republic of Uzbekistan;
- 2. **Zalilova Zaria Alfirovna** Candidate of Sciences, Associate Professor, Bashkir State Agrarian University, Ufa, Russian Federation;
- 3. **Gibadullin Arthur Arthurovich** Candidate of Sciences, Moscow Power Engineering Institute, Moscow, Russian Federation;
- 4. **Rakhmatov Mahmud Ismatovich** candidate of technical sciences, associate professor, Karshi Engineering-Economics Institute, Karshi, Republic of Uzbekistan;
- 5. Toshmamatov Bobir Karshi Engineering-Economics Institute, Karshi, Uzbekistan;
- 6. **Britvina Valentina Valentinovna** PhD, Associate Professor, Moscow Polytechnic University, Moscow, Russian Federation;
- 7. **Gavrilyuk Artyom** Ph.D., Lomonosov Moscow State University, Moscow, Russian Federation;
- 8. **Pulyaeva Valentina Nikolaevna** Candidate of Sciences, Financial University under the Government of the Russian Federation, Moscow, Russian Federation.

Conference organizers





Karshi Engineering-Economics Institute, Karshi, Uzbekistan





Bashkir State Agrarian University, Ufa, Russia