

Preface

Federal State Budgetary Institution of Science Federal Research Center Tyumen Scientific Center of the Siberian Branch of the Russian Academy of Sciences Research Institute of Agriculture of the Northern Trans-Urals jointly with the Ministry of Science and Higher Education of the Russian Federation, in cooperation with the University of Natural Sciences, city of Lublin (Poland), the Republican Unitary Enterprise Scientific and Practical Center of the National Academy of Sciences of Belarus for Agriculture (Republic of Belarus), the Federal State Budgetary Scientific Institution Federal Agrarian Scientific Center of the North-East named after N.V. Rudnitsky (city of Kirov), RF, Flinders University (Australia) on July 19-20, 2021 held the International Scientific and Practical Conference "Fundamental Scientific Research and Its Applied Aspects in Biotechnology and Agriculture" (within the framework of the meeting of the All-Russian Coordination Council for Forage Crops) FSRAABA 2021

Conference sections:

- Genetic resources and crop breeding;
- Physiology and immunology of agricultural plants;
- Soil resources and management of soil fertility parameters;
- Modern methods of crop protection;
- Biotechnologies in the agro-industrial complex;
- Topical issues of animal husbandry and veterinary medicine;
- Modern directions of highly productive environmentally friendly agro- and aquaculture, development and implementation of systems for the rational use of modern means of chemical and biological protection of agricultural plants and animals, the use of new preparations, growth substances, antidepressants, immunostimulants, probiotics and feed additives;
- Economics and management in the Agro-industrial complex.

The event was devoted to the discussion and solution of priority research and practical problems in the sphere of biology and agriculture, considering global trends. Within the framework of the conference, various research issues were touched upon, including the issues of genetics and breeding of oat and barley - the most important grain crops, received a wide discussion. This indicates their versatility, complexity, potential and significance for world science and economy. Agreements on strengthening international scientific cooperation, attracting key scientists and experts (both Russian and foreign) in specialized areas of joint work were reached.

More than 150 participants took part in the conference. The organizing committee received 196 manuscripts, 155 of which received positive reviews. Check of the manuscripts for compliance with the requirements was carried out by highly qualified specialists known to a wide range of domestic and foreign scientists.

The organizing and scientific committee would like to thank the speakers, experts, moderators, editors and audience for their interest in the work of the video conference, despite the COVID-19 pandemic. The conference was held at a high level and received positive reviews both in Russia and abroad. See you at forums, conferences, and symposia.

Look forward to further fruitful cooperation!

Chairman of the organizing committee, editor of conference materials:

- *Evgeny Renev* - Scientific Research Institute of Agriculture of the Northern Trans-Urals - a branch of the Tyumen Scientific Center of the Siberian Branch of the Russian Academy of Sciences, Russian Federation;

- *Ren Changzhong* - Baicheng Academy of Agricultural Sciences, China.

Deputy chairman of the organizing committee, deputy editor of conference materials:

- *Vaclav Romanyuk* - Institute of Technology and Natural Sciences in Falenty, Poland;

- *Galina Batalova* - Academician of the Russian Academy of Sciences, "Federal Agrarian Scientific Center of the North-East named after N.V. Rudnitsky", Russian Federation;

- *Yuri Shavrov* - Flinders University, Australia;

- *Maria Fomina* - Scientific Research Institute of Agriculture of the Northern Trans-Urals - a branch of the Tyumen Scientific Center of the Siberian Branch of the Russian Academy of Sciences, Russian Federation.