Preface

The International scientific-practical conference “Agriculture and Food Security: Technology, Innovation, Markets, Human Resources” dedicated to the 100th anniversary of agricultural science, education and enlightenment in the Middle Volga was successfully held at Kazan State Agrarian University & Samara State Agrarian University, Russia on November 13 – 14, 2019. The event was organized in close cooperation with the local government institutions responsible for the development of the agricultural sector.

The organizing committee of the conference received more than 200 applications for full-time participation and 260 applications for correspondence participation. Scientific works are presented by researchers from different regions of Russia as well as from other countries: Kazakhstan, Moldova, Turkey.

On November 13, a plenary session was held. It was attended by more than 200 people, both at Kazan SAU and Samara SAU. A total of 20 plenary reports were presented. On November 14, the work of 5 sections was organized in parallel at three sites: Kazan SAU, Samara SAU, and KSAVM, where more than 200 reports were presented, which reflected a wide range of issues related to different aspects of agronomy and crop production, agricultural production, food safety, and veterinary, issues of modern mechanization and technical service in agriculture, economy and personnel support of agriculture. On November 14, the final plenary session was held, where the results were summed up and the certificates were presented to the participants.

The conference participants noted the positive and creative experience of more than 100 years of agricultural science, education and enlightenment in the Middle Volga region, represented, inter alia, by the activities of such universities as Kazan State Agrarian University, Samara State Agrarian University and Kazan State Academy of Veterinary Medicine named after N. E. Bauman. It was stressed that food security is inseparable from food safety and that in the world, in which the food supply chain has become significantly more complex, any adverse food safety incidents can have negative consequences for public health, trade, and the economy worldwide. The participants highlighted the fact that strengthening food security has a positive impact on trade, employment, and poverty reduction. Also, it was taken into account that modern agricultural science and production need the use of high and resource-saving technologies that contribute to the rational use of natural resources, the development of modern methods of animal husbandry, the modernization and digitalization of mechanization processes and technical services, staffing agriculture in the digital economy. The conference participants showed themselves as researchers who are aware of the urgent need to raise awareness at all levels and to promote global activities in support of food safety based on scientific principles in accordance with international and Russian standards.

The participants of the conference consider it very useful and fruitful to exchange the experience of research work in the field of agriculture not only in Russia, but also in neighboring territories, taking into account the peculiarities of socio-economic, cultural and historical development, international experience.

As a result of the discussion, the following conference resolutions were adopted:

- to use the successful experience of a number of agricultural educational and scientific institutions for the development of agricultural science and education in the Russian Federation;
- to increase the activity of joint research, including through participation in grants at various levels;
- to promote the integration of intellectual efforts of scientists and scientific and pedagogical workers from different universities of Russia and abroad;
- to form practice programs based on a competent approach in the process of training and retraining of agricultural personnel in the framework of the application of digital technologies in agriculture;
- to intensify research on the development of scientifically relevant, effective methods of disease prevention, increase animal productivity, formation of soil fertility;
- to initiate the creation of joint research teams to justify scientific approaches to the biologization of agricultural products;
- to promote the creation of technologies for the production of modern safe food products of a new generation using functionally valuable biologically active components of natural origin in order to develop environmentally safe food production;
- to use more widely the natural resource potential of the territories;
- to inform the Ministry of Agriculture of the Russian Federation, the Ministries of Agriculture and Food of the Republic of Tatarstan and the Samara region, with the conference materials to use research as recommendations to agricultural producers and development programs staffing of the agriculture of the Volga region;
- to highlight the importance of the historical, territorial and national characteristics, customs, and traditions of the peoples inhabiting the Volga region and adjacent territories in the implementation of research in relation to various aspects of agriculture;
- to distinguish expansion of international relations, involvement of more young scientists and students in scientific and innovative activities as the most important directions of development of agricultural science;
- to promote the results of the conference among students and schoolchildren in order to deepen the young generation’s understanding of changes in the environment, agricultural and socio-cultural sphere.

At last, we would like to thank all the participants and conference organizers as well as reviewers and editors for their invaluable contribution in preparing the conference proceedings.

With the kindest regards,
Committee Members