



PREFACE

International scientific conference Fundamental and Applied Scientific Research in the Development of Agriculture in the Far East, AFE-2022, took place on January 25-28, 2023. The conference had two parallel venues: Tashkent State Agrarian University, Uzbekistan, and Far Eastern State Agrarian University, Russia.

The event spotlighted new ideas on farming processes, new analytical methods that are applicable to a broad range of agricultural systems, discussed new technologies and solutions, which help agricultural systems to function in the modern conditions of a changing climate and digitalization. Professionals, scholars and researchers in the field of agriculture from different countries, as well as heads and top managers of agricultural enterprises participated in the conference.

Results of research in the following areas were presented at the conference: software-as-a-service solutions for orchard management, farm management platforms, yield monitoring and estimation, IoTs in farming, water management, smart agriculture machines, eco-friendly plant production products, and eco-friendly packaging.

Several round tables for professional discussions were held, where future directions for advancing agricultural research were discussed.

The thematic sections of the conference focused on the study of interactions between the components of agricultural systems, between their hierarchical levels, between different types of land use systems, and between agricultural systems and the economic environment.

The conference presented the methods and tools for agricultural systems design, estimation and monitoring, which are intended to improve the environmental and economic performance of agricultural systems.

As part of the conference, an exhibition of innovative technologies and equipment was organized, that was dedicated to robotics in the field of precision agriculture, real-time technology, fertilizer and sprayer controllers, robotics, variable rate irrigation, networks and remote sensing technologies, Data management software, etc.

One of the conference exhibitions traditionally was dedicated to water management, water management tools and technology weather tracking and forecasting with accurate real-time readings, which was informative and helpful in terms of choosing spraying and irrigation modes.

All submitted papers have passed a rigorous scientific and technical selection. Only papers that present the results of original research were accepted.

The Organizing Committee, as well as the participants of the conference, express their gratitude to journal E3S Web of Conferences for the publication articles of AFE-2022.