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BOOK OF ABSTRACTS

*XII International Scientific
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"AGROSYM 2021"
October 7-10, 2021*



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PREFACE

Dear colleagues,

In your hands is the Book of Abstracts of the 12th International Scientific Agricultural Symposium "AGROSYM 2021", which I hope you will find useful in your work. As many as 700 contributions have been accepted for the Book of Abstracts. The themes of AGROSYM 2021 cover all branches of agriculture and are divided into seven sessions: 1) Plant production, 2) Plant protection and food safety, 3) Organic agriculture, 4) Environmental protection and natural resources management, 5) Animal husbandry, 6) Rural development and agro-economy, and 7) Forestry and agroforestry.

The multi-functionality of agriculture (viz. crop production, animal production and fisheries) and the central role it plays in food production, food security, rural development, bio-economy (e.g. production of fibres and raw materials for industries) and green economy (e.g. production of biofuels) determine its importance in all countries; especially nowadays, with the second year of the COVID-19 pandemic.

Many scholars and practitioners argue that technology will increase production and feed more people while reducing the variability as well as the environmental impacts of agricultural production. Technology has been particularly important for improving production in non-tree crops such as maize, rice, soybean, wheat and cotton. Because trees have longer cycles, they take longer to improve through traditional breeding programs. New techniques of plant breeding can improve productivity further, but there is a lively academic debate about their pros and cons.

While the focus has been in the past on the production side (cf. productivity, efficiency), more and more attention is nowadays paid to the consumption side as well as the intermediate stages (e.g. processing, distribution) of the food chain thus moving towards a 'farm to fork' approach. Globally, consumers are sending clearer signals than ever before about what they want on their tables i.e. higher quality as well as healthier, safer, and tastier products. Therefore, most companies in the food industry are currently exploring different ways to ensure that they have more control over the production processes for agricultural commodities as well as final products quality. Changes in investment strategy also have the potential to reduce the environmental and social costs of agriculture. It is now apparent to most investors that companies that pay more attention to sustainability and social responsibility, even with the same financial rating, will have better returns both in the short term and over time.

Agri-food systems have been central in the global debate on sustainable development and the achievement of the Sustainable Development Goals (SDGs) as shown by the recent United Nations' Food Systems Summit held in September 2021 in New York. Indeed, agri-food systems are at the center of various global challenges such as climate change, poverty, vulnerability, food insecurity, biodiversity loss, resource scarcity and ecosystem degradation. In this context, one of the goals of the sustainable agriculture movement is to create farming systems that mitigate or eliminate environmental harms associated with industrial agriculture.

Many thanks to all the authors, reviewers and colleagues for their help in editing the Book of Abstracts. Special thanks go to all co-organizers and partners for their unselfish collaboration and comprehensive support.

East Sarajevo, 07 October 2021

Prof. Dušan Kovačević, PhD

Editor in Chief, President of the Scientific Committee of AGROSYM 2021



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HUMUS CONTENT IN SERBIA TO THE MAPPING INVESTIGATED PITCH

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Abstract

Soil is one of the most important resources of each state. The research in this study was conducted in order to preserve this very important resource. Humic substances have a positive effect of water-air maintenance and total biological properties of the soil which have a direct impact on plant nutrition and and in the first place on the nutrition of plants with nitrogen. Humus content is the basic parameter of soil fertility. The paper analyzes humus content of 21 localities in central Serbia. Total is examined 5.313 samples. Results on humus content indicate that there are soils from insufficiently humus to extremely humus. In 92% of the examined soil samples are weak and medium humus, 7% of the soil is very humus a only 1% insufficiently humus. The obtained results can be related to the natural properties of soil types on the examined plots, but also to the way of applying fertilizers on them. Natural climatic processes and the impact of anthropogenic influence, man continuously affect changes in soil quality. All plots are mapped and based on the obtained results recommendations are given agricultural producers on repair measures and application of organic and mineral fertilizers.

Key words: *Soil, conservation of resources, humus content, repair measures, mapping.*