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The Rector's Foreword

Dear Colleagues,

The food, agriculture and livestock sectors have the highest profitability among value-added products with low capital investments and minimal labor costs throughout the world. They are important for their potential to improve prosperity, wealth, and quality of social life.

In the last century, the average yield has increased threefold and as much as 30 fold in some areas of agricultural production. These are the effects of generation, sharing, and implementation of new agricultural developments.

The purpose of this congress, organized by Faculty of Agriculture of Namık Kemal University, with the support of Association of Thrace Universities, was to create an international platform where many aspects of the latest agricultural developments and applications were discussed.

This was an international Congress, with a scientific committee comprised of scientists from different universities and institutions of Balkan countries. The congress made significant contributions to strengthening the collaborations between scientists working on agriculture in Balkan countries, increasing the agricultural production potential of the region, and the development of friendships of participants from different countries.

Many academics, government officials, engineers, firms in related industries, and representatives of civil society organizations attended the Second International Balkan Agriculture Congress.

It was our pleasure and privilege to thank valuable members of Agricultural Faculty of Namık Kemal University and the Association of Thrace Universities, along with the other participating institutions, Trakya University, Çanakkale Onsekiz Mart University, Agriculture University - Plovdiv, Democritus University of Thrace, Trakya Agricultural Research Institute, Kırklareli Atatürk Soil and Water Agricultural Meteorology Research Institute, and Tekirdağ Viticulture Research Institute, and valuable participants of the congress, for their valuable contributions to science globally.

Congress attendees had the chance to benefit from scientific exchange during either the formal activities or the informal meetings with colleagues from different backgrounds, but also had a chance to relax thanks to the opportunities provided by the multiple cultural events and by the superb Turkish gastronomic tradition.

Prof. Dr. Osman ŞİMŞEK
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Speakers			

Prof. Dr. Spyridon D. Koutroubas Dean, School of Agricultural & Forestry Democritus University of Thrace, Greece	Improving yield and nitrogen-use efficiency in Mediterranean agroecosystems
Prof. Dr. Dragan Škorić Serbian Academy of Sciences and Arts, Novi Sad, Serbia	Achievements of sunflower breeding
Prof. Dr. Alain Carbonneau Retired Professor of Viticulture of Montpellier Sup Agro, France	Experimental methodology and modeling in grapevine physiology: fundamentals and practices.
Prof. Dr. İ. Hakkı İnan Agricultural Faculty, Namık Kemal University, Turkey	Environmental problems of Thrace Region in Turkey
Prof. Dr. Zoran Popovski Faculty Of Agricultural Sciences And Food, Ss Cyril And Methodius University in Skopje, Republic of Macedonia	Evolution in the GMO Detection and Quantification
Prof. Dr. Robert Hasterok Faculty of Biology And Environmental Protection, University Of Silesia in Katowice, Poland	Dissecting grass genome organisation at the cytomolecular level using the model genus <i>Brachypodium</i>
Assoc. Prof. Dr. Apostolos Kyriazopoulos Department of Forestry and Management of the Environment and Natural Resources, University of Thrace, Greece	An overview on forage resources in Greece

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Quantitative and chemical traits in broccoli (*Brassica oleracea L.var. italica*) grown with the use of microbiological fertilizer

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The experiment was conducted in order to determine the influence of the microbiological fertilizer Slavol on the yield and chemical traits in broccoli that were produced in open field. It was used the variety Verdija F1 which was grown in Skopje region during three years (2011, 2012, 2013). The treatments were as follows: Ø control - without use of microbiological fertilizer, V-1 - foliar treatment every 7 day with 0,1% solution of Slavol and V-2 - drip irrigation treatment every 2 days with 0,1% solution of Slavol. The following traits were examined: water, total dry matter, ash, total acids, vitamin C, plant fibers, potassium, phosphorus, calcium, magnesium, iron, manganese, nitrogen, protein, glucose and fructose. According the obtained results it can be established that with the use of microbiological fertilizer Slavol the considerable higher yield gave the treatment V-2 (12.3 t/ha) in comparison to control treatment (10.2 t/ha) and treatment V-1 (10.7 t/ha). In relation to chemical composition the treatment V-2 showed higher average values in comparison to control treatment and treatment V-1 for the following traits: total dry matter (13,4%), vitamin C (43,6 mg/100g), calcium (201 mg/100g), magnesium (271.7 mg/100g), protein (3.6%) and glucose (1.4%).

Keywords: broccoli, microbiological fertilizer, yield, chemical composition