

# BOOK OF ABSTRACTS

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IV INTERNATIONAL SYMPOSIUM FOR AGRICULTURE AND FOOD

**ISAF 2022**

12-14 October 2022, Ohrid, North Macedonia





# BOOK OF ABSTRACTS

## IV INTERNATIONAL SYMPOSIUM FOR AGRICULTURE AND FOOD ISAF 2022

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IV INTERNATIONAL SYMPOSIUM FOR AGRICULTURE AND FOOD  
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Europe – Deans meeting  
13th International Conference of the Association of Agricultural  
Economists of the Republic of North Macedonia (AAEM) and  
celebrating 25th anniversary of AAEM  
9th Balkan Animal Sciences Conference BALNIMALCON 2022

IV МЕЃУНАРОДЕН СИМПОЗИУМ ЗА ЗЕМЈОДЕЛСТВО И ХРАНА ,  
40-та Средба Факултет-Стопанство  
Асоцијација на факултети за земјоделски науки и храна на  
Југоисточна Европа – средба на декани  
13-та Меѓународна конференција на Здружение на  
агроекономистите на Република Северна Македонија (ЗАЕМ) и  
одбележување на 25 години постоење на ЗАЕМ  
9th Balkan Animal Sciences Conference BALNIMALCON 2022

Organized by the  
Faculty of Agricultural Sciences and Food - Skopje  
Ss. Cyril and Methodius University in Skopje

## BOOK OF ABSTRACTS

In this Book of Abstracts you will find more than 250 abstracts classified in 10 thematic sections. The abstracts are published in their original form as provided by the authors. Double-blinded review will apply for the submitted full papers following the Instructions for Authors available at the ISAF 2022 web site. Looking forward to receive your full papers.

On behalf of the Secretariat of the 4th International Symposium for Agriculture and Food - ISAF 2022,

Ivana Janeska Stamenkovska  
President of ISAF 2022 Secretariat

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## Plenary Speakers

### **Prof. Dr. Riccardo Valentini**

Topic: Climate change: the new challenges of smart agriculture and its digital transformation

Dr. Riccardo Valentini is full professor of Forest Ecology at the University of Tuscia, Italy. His expertise concern the role of land use changes and forestry in the carbon cycle, biodiversity and bioenergy. He is also involved through IPCC and governmental bodies on policies about the global carbon cycle and the role of land use changes and forestry. He is coordinator of several EU projects aiming to understand and quantify the terrestrial carbon budget and greenhouse gases emissions. He is coordinator of the EU-Project CARBOAFRICA. He is Doctor Honoris Causa Faculté Universitaire des Sciences Agronomiques de Gembloux, Belgium. He is a Nobel Prize for Peace as member of the IPCC board. He is Director of the Impacts Division of the Euro-Mediterranean Center on Climate Change and Member of the Biogeoscience Committee of the European Research Council.

2009: Chairman of the Global Terrestrial Observation System Programme, sponsored by FAO/UNESCO/UNEP/ICSU/WMO.

2010: Coordinator of the EU project CLIMAFRICA.

2010: Award of the Advanced Senior Grant of the European Research Council.

2010: Member of Aurelio Peccei Foundation – Club di Roma 2011 – Coordinator of the EU project GEOCARBON.

### **Prof. Dr. Emil Erjavec**

Topic: Don't the changing economy and society demand a profound reform of university agricultural education?

Dr. Emil Erjavec, head of Governing Board of University of Ljubljana Slovenia (UL) is Full professor of Agricultural Policy and Economics at the Biotechnical Faculty, and President of the University Ljubljana Managerial Board. Between 2002-2018 he was lecturer at the University of Natural Resources and Life Sciences (BOKU) in Vienna. He is former dean (2018-2020) and between 2010-2014 and 2016-2018, 2020-2021 vicedean of Biotechnical Faculty University of Ljubljana. For the period 2016-2018, he was the Chairman of Council for agriculture and rural development of the Republic of Slovenia. His research expertise covers various aspects of agricultural economics, and he has published over 70 research papers pertaining to national and European agricultural policy, transition and EU integration studies, agricultural sector modelling and political economy analysis. He has assumed numerous coordinating positions in national and international research efforts. In the years 1998-2004, he participated in the talks preceding EU accession as a member of Slovenia's core negotiations team responsible for agriculture. Since 2003, he has been engaged as counsellor in negotiations related to the European Union's periodic financial perspectives and CAP reforms. He has also been invited to share his knowledge and experience as policy and rural development analyst to the FAO, OECD, European Commission and European Parliament, as well as to the governments of all Western Balkan countries. Between 2008 and 2014, he was a Board member of the European Association of Agricultural Economics (EAEE) and between 2008 and 2013 he was president of the Slovenian Association of Agricultural Economics. For his cooperation efforts, he is getting honourable Doctor degree from the Ss. Cyril and Methodius University in Skopje.



ID: 221

**INFLUENCE OF HUMIC ACIDS AS A FEED SUPPLEMENT ON THE REPRODUCTIVE PERFORMANCE OF SOWS****Trajchev, Metodija Boris<sup>1</sup>; Micev, Dimitar<sup>2</sup>; Nakov, Dimitar<sup>3</sup>; Gjorgievski, Srekkjo<sup>1</sup>; Glavas Dodov, Marija<sup>4</sup>**

<sup>1</sup>Faculty of Agricultural Sciences and Food-Skopje, Ss. Cyril and Methodius University in Skopje, North Macedonia; <sup>2</sup>Student; <sup>3</sup>Faculty of Agriculture, Goce Delcev University Stip, North Macedonia; <sup>4</sup>Faculty of Pharmacy, Ss. Cyril and Methodius University in Skopje, North Macedonia; [metot@fznh.ukim.edu.mk](mailto:metot@fznh.ukim.edu.mk)

**Abstract**

A study was conducted to determine the effect of dietary natural humic acids as feed supplements in the diet on a sow's reproductive performance. During the survey, there were followed 26 pregnant and latter farrowed sows together with their litters, divided into two groups, 12 of them belonged to the control group and 14 in the test group. In the test group, one month before the expected farrowing of sows (late gestation) to weaning, a commercial feed supplement from dietary humic acids was given. The piglets' loss in the suckling period from birth to weaning in the control group was 22.62%, while in the test group was 17.19%. The proportion of dead piglets until weaning versus the number of piglets born alive, in the control group was 8.45%, while in the test group was 3.65%, but without a statistically significant difference. Depending on the sow's dietary treatment, there did not find statistically significant differences in reproductive performances between the groups. The average litter's birth weight in the test group was 2 kg greater than the average birth weight of litters in the control group. The average litter weight at weaning in the test group was 3.61 kg greater than the average litter's weight in the control group. There was no found statistically significant influence of sow's dietary treatment with humic acids supplements on piglet's weight gain. The balanced sow's diet in the most sensitive period from farrowing to weaning is of great importance for obtaining improved reproductive performances in sows.

*Keywords:* sows, gestation, lactation, nutrition, litter