

BOOK OF ABSTRACTS

IV INTERNATIONAL SYMPOSIUM FOR AGRICULTURE AND FOOD

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IV INTERNATIONAL SYMPOSIUM FOR AGRICULTURE AND FOOD ISAF 2022

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Europe – Deans meeting
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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: 209**TEMPERATURE-HUMIDITY INDEX IS ASSOCIATED WITH HEAT STRESS AND MILK YIELD OF DAIRY COWS****Nakov, Dimitar¹; Trajchev, Metodija²; Andonov, Sreten²**

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Abstract

Temperature humidity index (THI) is an important indicator of heat stress loading. The objective of this study was to evaluate the effect of THI on the daily production of dairy cows. The survey was conducted in the summer season from 15th of June to 15th of September. There were include two small family dairy farms with installed cooling systems for microclimate controlling. Totally 18 dairy cows from Holstein black-white breed were subjected to the study (6 cows in farm A and 12 cows in farm B). During the trial period daily average air temperature and relative humidity, as well THI were calculated from the hourly data gained from the automated temperature and humidity data loggers on-farm. The daily milk yield per cow was estimate as sum of milk yield gaining during the morning and evening milking. Test-days data were analyzed using General linear model, univariate procedure to determine the threshold of THI and heat stress and their influence on decline of milk production. The value of THI was ranged from 61.82 to 89.34, which indicates the existence of the moderate intensity of heat stress. THI was in a significant negative correlation with the milk yield and there was existing high positive correlation between THI and heat stress. The present results revealed that the combined effects of air temperature and humidity associated with the level of thermal stress make the considerable loss in the milk production of the dairy cows.

Keywords: lactation, dairy barn, thermal comfort