

V CONGRESS OF THE SERBIAN GENETIC SOCIETY

BOOK OF ABSTRACTS

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Editors

Branka Vasiljević

Snežana Mladenović Drinić

Technical editors

Zorana Kurbalija Novičić

Bojana Banović

Aleksandra Patenković

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eldastankovic@hotmail.com

WELCOME TO V CONGRESS OF THE SERBIAN GENETIC SOCIETY!

Dear colleagues,

Welcome to the 5th Congress of the Serbian Genetic Society. The Serbian Genetic Society (SGS) has been founded in 1968 and the first Congress organized by the SGS was held 20 years ago in Vrnjacka Banja. Since then, the Congress of Serbian Genetic Society is held every five years. Over the past 20 years, the Congress has grown from a national to an international meeting. On this occasion we will have participants from 26 countries, so we believe that this conference will successfully provide a platform for regional and international researchers and professionals in genetics to have a productive dialogue and share their views.

The aim of the Congress is to reflect on progress made in genetics, to celebrate the best of contemporary research and to anticipate future developments in the discipline.

The Congress will focus on wide range of topics organized in 8 sessions: Human Genome Variation, Medical Genetics, Genetic Toxicology: From Cell to Ecosystem, Adaptation to Changing Environments, Genetic Diversity, Phylogeny and Conservation, Methodology in Genetic Research, Pre Breeding and Breeding, New Techniques in Breeding. The programme will include 21 plenary lectures, 44 oral and 255 poster presentation and also, a special feature of the Congress will be a roundtable on novel food.

More than 300 participants are expected to attend this year's Congress. Many of the presentations will accordingly be in lecture-like settings, but we hope that there will also be ample opportunities for informal interaction outside the scheduled sessions. We hope that participants will have opportunity not only to attend presentations of cutting-edge research, but also through those interactions to launch new projects and to spend time with co-authors.

The successful organization of the Congress has required the talents, dedication and time of many members of the Scientific and Organizing committees and strong support from sponsors.

I hope that you will find the Congress both pleasant and valuable, and also enjoy the cultural and natural beauty of Kladovo and National park Djerdap.

Yours sincerely,



Branka Vasiljevic
Chair of the Scientific Committee

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III-06 Poster

Genotoxicity evaluation of the Sava river using comet assay on silver bream (*Abramis bjoerkna* L. 1758)

Jovana KOSTIĆ^{1,2}, Stoimir KOLAREVIĆ², Margareta KRAČUN-KOLAREVIĆ³,
Mustafa ABORGIBA², Samia ELBAHI², Jelena KNEŽEVIĆ-VUKČEVIĆ²,
Mirjana LENHARDT¹, Zoran GAČIĆ¹ and Branka VUKOVIĆ-GAČIĆ²

¹Institute for Multidisciplinary Research, University of Belgrade, Belgrade, Serbia

²Center for Genotoxicology and Ecogenotoxicology, Faculty of Biology, University of Belgrade, Belgrade, Serbia

³Institute for Biological Research "Siniša Stanković", University of Belgrade, Belgrade, Serbia

The aim of this study was to evaluate genotoxic potential of the Sava River during 2014, at site Duboko in the Belgrade region, which is under the impact of agricultural, urban and industrial activities. DNA damage was determined by alkaline comet assay in different tissues of silver bream (*A. bjoerkna* L. 1758). To obtain basic level of DNA damage, some specimens were subjected to acclimation for 20 days. The level of DNA damage in tissues of silver bream after acclimation correlated with the damage detected in populations of species from Cyprinidae family from unpolluted control site in Special Nature Reserve "Uvac". Higher level of DNA damage in tissues of silver bream from the site Duboko comparing to data obtained after acclimation indicated the presence of genotoxic pollution. Physical and chemical parameters and microbiological quality of water were in correlation with comet assay. Tissue samples were also collected for histopathology and heavy metals analyses which will provide further insight in the origin and fate of detected genotoxic influence.

Keywords: comet assay, *Abramis bjoerkna*, genotoxicity, the Sava River