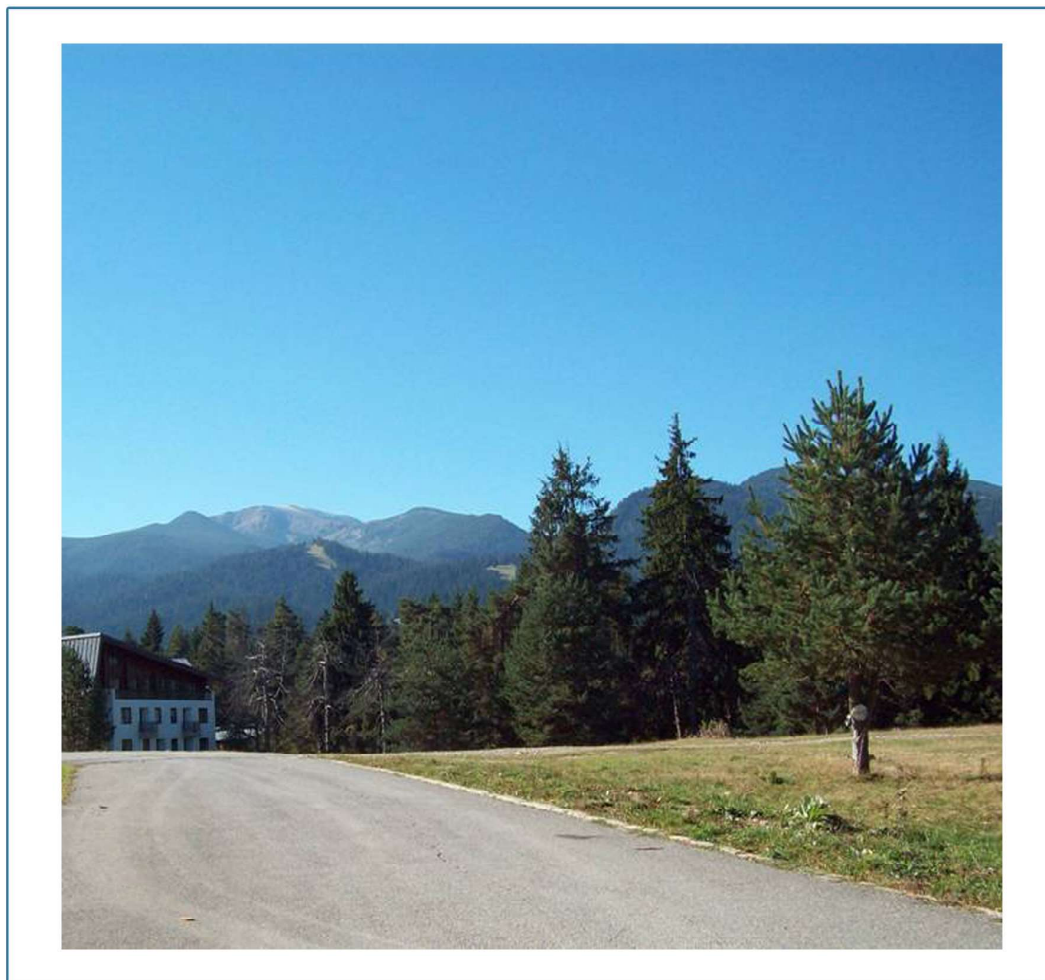


**UNION OF SCIENTISTS IN BULGARIA
SECTION BIOLOGY**

INSTITUTE OF BIODIVERSITY AND ECOSYSTEM RESEARCH – BAS



**INTERNATIONAL SEMINAR OF
ECOLOGY - 2020**

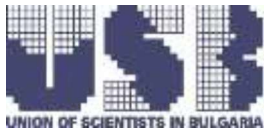
DEDICATED TO 10TH ANNIVERSARY OF IBER-BAS

On-line SEMINAR 23-24 April 2020



**Програма/Program
Абстракти/Abstracts**





INTERNATIONAL SEMINAR OF ECOLOGY- 2020



DEDICATED TO 10TH ANNIVERSARY OF IBER-BAS

ONLINE SEMINAR 23 - 24 April 2020

Sofia, Bulgaria

SCIENTIFIC PROGRAM

23 April 2020

9⁰⁰ – 9²⁰ Opening Ceremony - *Prof. Stephka Chankova PhD*

THEMATIC SESSION I


BIOTIC AND ABIOTIC IMPACT ON THE LIVING NATURE AND MECHANISMS OF ADAPTATION


Chairperson: Assoc. Prof. Michaela Beltcheva, PhD

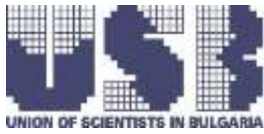
Plenary presentation

9²⁰-9⁴⁰ **COMPLEX CHARACTERISTICS OF HIGH LIGHT INDUCIBLE (Hli) PROTEIN OF CHLOROPHYLL PROTEIN COMPLEXES IN CYANOBACTERIA.** *Nadezhda Yurina, Lubov Sharapova* PL01_01

Oral presentations

9⁴⁰-9⁵⁰  **HOW *CHLORELLA* SPECIES RESPOND TO UV-B INDUCED STRESS.** *Daniela Miteva, Teodora Todorova, Stephka Chankova* L01_01


9⁵⁰-10⁰⁰  **ISOLATION AND CHARACTERIZATION OF ELECTROGENIC IRON-REDUCING BACTERIA OF THE GENUS *GEOBACTER* AND POSSIBILITIES OF THEIR APPLICATION IN MICROBIAL FUEL CELLS.** *Iskra Yankova, Ralitsa Ilieva, Boyanka Angelova, Mihail Iliev* L01_02



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DEDICATED TO 10TH ANNIVERSARY OF IBER-BAS

10⁰⁰-10¹⁰  **STRESS INDUCED DAMAGES IN PSAMOPHILIC BIVALVE SPECIES: A PILOT STUDY ON *DONAX TRUNCULUS* L. FROM BLACK SEA HABITATS IN THE UPPER SUBTIDAL ZONE (BULGARIA).** *Lachezar P. Yakimov, Elina R. Tsvetanova, Almira P. Georgieva, Nesho H. Chipev & Albena V. Alexandrova* **L01_03**

10¹⁰-10³⁰ Discussion

10³⁰-10⁴⁰ Session break

10⁴⁰ – 10⁵⁰ Chairperson: Assoc. prof. Kalina Danova PhD

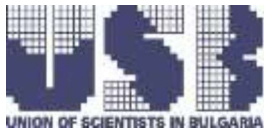
10⁵⁰-11⁰⁰ SET OF TESTS FOR CHLORPYRIFOS TOXICITY SCREENING. *Teodora Todorova, Petya Parvanova, Hilal Çavuş, Mariya Yovkova, Maria Dimitrova, Samia Mostafa M. Mohafrash, Abdel-Tawab H. Mossa, Krasimir Boyadzhiev, Martin Dimitrov and Stephka Chankova* **L01_04**

11⁰⁰-11¹⁰ EFFECTS OF SALT STRESS ON THE PHOTOSYNTHESIS OF MAIZE AND SORGHUM. *Martin Stefanov, Georgi Rashkov, Ekaterina Yotsova, Preslava Borisova, Anelia Dobrikova, Emilia Apostolova* **L01_05**

11¹⁰-11²⁰ RELATIONSHIPS BETWEEN SOIL MICROBIAL ACTIVITY, ABIOTIC FACTORS AND BACTERIAL COMMUNITY STRUCTURE ALONG THE HEAVY METAL CONTAMINATION GRADIENT. *Daniel Palov, Michaella Aleksova, Radina Nikolova, Nikolai Dinev, Silvena Boteva, Anelia Kenarova, Roumen Dimitrov, Galina Radeva* **L01_06**

11²⁰-11³⁰ OBSERVED REDUCTION BY A FACTOR OF 10 IN THE WHOLE-BODY TOTAL β -ACTIVITY OF SMALL MAMMALS FROM ALPINE ECOSYSTEMS IN RILA MOUNTAIN, BULGARIA. *Peter Ostoich, Michaela Beltcheva, Iliana Aleksieva, J. A. Heredia-Rojas, Elena Geleva, Ivanka Ravnachka, Chisto Angelov* **L01_07**

11³⁰ – 11⁴⁰ UTILIZING THE INDIGENOUS BIOSYNTHETIC CAPACITY OF *ARTEMISIA ALBA* TURRA THROUGH OPTIMIZATION OF TISSUE CULTURE CONDITIONS. *Kalina Danova, Antoaneta Trendafilova, Václav Motyka, Petre Dobrev, Viktoria Ivanova, Milka Todorova* **L01_08**



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11⁴⁰-11⁵⁰ INFLUENCE OF SALT STRESS ON GROWTH AND ESSENTIAL OIL PRODUCTION OF CHERVIL PLANTS. *M. S. Hussein, S. F. Hendawy, A. E. El-Gohary* L01_09

11⁵⁰-12¹⁰ Discussion

12¹⁰-13¹⁰ Lunch break

THEMATIC SESSION II LANDSCAPE ECOLOGY

13¹⁰ – 13²⁰ *Chairperson: Assoc. prof. Galina Radeva PhD*

Plenary presentation

13²⁰-13⁴⁰ ECOGEOCHEMICAL ASPECTS OF LANDSCAPES. *Zornitza Cholakova* PL02_01

Oral presentations

13⁴⁰-13⁵⁰ CARBON SEQUESTRATION – A RESEARCH SUBJECT OF A PRESENT IMPORTANCE. *Borislav Grigorov, Assen Assenov* L02_01



13⁵⁰-14⁰⁰ COMPARATIVE ANALYSIS OF ANTHROPOGENIC TRANSFORMATIONS OF LANDSCAPES IN THE LANDS OF THE SETTLEMENTS OF BELOZEM (PLOVDIV PROVINCE) AND OPALCHENETS (STARA ZAGORA PROVINCE) WITH REMOTE SENSING. *Ilija Tamburadzhiev* L02_02

14⁰⁰-14¹⁰ ASSESSMENT OF FLOOD REGULATION CAPACITY OF DIFFERENT LAND COVER TYPES IN KRUMOVITSA RIVER BASIN (EASTERN RHODOPE). *Petko Bozhkov, Borislav Grigorov, Assen Assenov* L02_03



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14¹⁰-14²⁰ DEVELOPMENT OF ACCURATE CHEMICAL THERMODYNAMIC DATABASE FOR GEOCHEMICAL STORAGE OF NUCLEAR WASTE. PART I. MODELS FOR PREDICTING SOLUTION PROPERTIES AND SOLID-LIQUID EQUILIBRIUM IN BINARY NITRATE SYSTEMS OF THE TYPE 1-1. *Stanislav Donchev, Christomir Christov* L02_04

14²⁰-14⁴⁰ Discussion

14⁴⁰- 14⁵⁰ Session break

THEMATIC SESSION III ECOLOGY AND EDUCATION

Chairperson: Assoc. prof. Marina Stanilova PhD

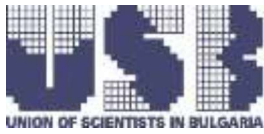
Oral presentations

14⁵⁰-15⁰⁰ SENSITIVITY ANALYSIS OF WATER QUALITY INDEXES – A CASE STUDY OF TOPOLNITSA AND LUDA YANA RIVERS. *Marian Varbanov, Kristina Gartsyanova, Atanas Kitev, Stefan Gentchev, Stela Georgieva* L03_01

THEMATIC SESSION IV ECOSYSTEM RESEARCH, SERVICES AND ECOLOGICAL AGRICULTURE

Plenary presentation

15⁰⁰-15²⁰ ORGANIC CULTIVATION OF NEW MEDICINAL AND AROMATIC PLANTS AS A SOURCE FOR PHARMACEUTICAL INDUSTRIES *Saber Hendawy* PL04_01



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DEDICATED TO 10TH ANNIVERSARY OF IBER-BAS

Oral presentation

15²⁰-15⁴⁰ RESPONSE OF AMARANTHS PLANTS TO LIQUID BARITE AND HUMIC ACID APPLICATIONS. *A. E. El-Gohary, S .F. Hendawy, M. S. Hussein* L04_01

15⁴⁰-15⁵⁰ Discussion

15⁵⁰ - 17⁰⁰ Poster session and Discussion


Chairpersons: Assoc. Prof. Galina Radeva, Assoc. Prof. Marina Stanilova, Assoc. Prof. Kalina Danova

POSTER SESSION

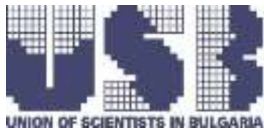
THEMATIC SESSION I

BIOTIC AND ABIOTIC IMPACT ON THE LIVING NATURE AND MECHANISMS OF ADAPTATION

P01_01 THE RESISTANCE AND RESILIENCE OF SOIL ENZYMES AFTER THE APPLICATION OF FUNGICIDE AZOXYSTROBIN TO LOAMY SAND SOIL. *Silvena Boteva, Anelia Kenarova, Stela Dimitrova, Hristo Chaney, Michaella Aleksova, Galina Radeva*

P01_02  **THE EFFECT OF SEASONALITY OF CLIMATE CONDITIONS ON THE STRUCTURE AND FUNCTIONAL PERFORMANCE OF PHOTOSYNTHETIC APPARATUS OF MEDICINAL PLANT *PETASITES HYBRIDUS*.** *Borislava Borisova, Svetlana Momchilova, Dimitrina Koleva, Albena Ivanova, Albena Momchilova, Liliana Maslenkova*


P01_03 SESQUITERPENE PATTERNS OF THE LEAVES AND ROOTS IN LOCAL POPULATIONS OF MEDICINAL PLANT *PETASITES HYBRIDUS* (L). *Veselina Uzunova, Rumiana Tzoneva, Albena Momchilova, Liliana Maslenkova*



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P01_04  **ANTI-SALMONELLA ACTIVITY OF LACTOBACILLI FROM DIFERENT HABITATS.** *Lili Dobрева, Miglena Koprinarova, Vasilena Georgieva and Svetla Danova*

P01_05 SEASONAL COMPOSITION AND DENSITY OF MARINE LITTER ON ASPARUHOVO BEACH, VARNA, BULGARIA. *Marina Panayotova, Radoslava Bekova, Kremena Stefanova, Valentina Todorova, Media Gumus, Violeta Slabakova, Bogdan Prodanov, Svetla Mihova*

P01_06 PLASTIC DEGRADATION BY EXTREMOPHILIC MICROBIAL COMMUNITIES. *Tsvetelina Paunova-Krasteva, Nikolina Atanasova, Nadya Radchenkova, Ivanka Boyadzhieva, Stoyanka Stoitsova, Margarita Kambourova, Yulia Taktarova, Dina Malakhova, Elena Tsavkelova, Maria Egorova, Maria Dorofeeva, Ivan Bubnov, Irina Kotova, Elizaveta Bonch-Osmolovskaya, Tatyana Sokolova, Alexander Elcheninov*

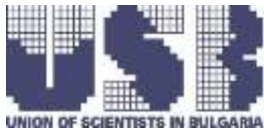
P01_07  **CANOPY EFFECTS ON THE DISTRIBUTION OF *OPHRYS INSECTIFERA* (ORCHIDACEAE) – PRELIMINARY RESULTS FROM HEMISPHERICAL IMAGING ANALYSIS.** *Andrey Popatanasov, Asen Asenov*

THEMATIC SESSION IV

ECOSYSTEM RESEARCH, SERVICES AND ECOLOGICAL AGRICULTURE

P04_01 FIRST IMPLEMENTATION OF MSFD FRAMEWORK FOR BENTHIC BROAD HABITATS ASSESSMENT IN THE BULGARIAN BLACK SEA. *Valentina Todorova, Valentina Doncheva, Ekaterina Trifonova*

P04_02 EFFECT OF MIXED CROPPING SYSTEMS ON YIELD AND QUALITY OF LETTUCE (*LACTUCA SATIVA* L.). *Ivanka Mitova, Lilyana Koleva*



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THEMATIC SESSION V

OTHER RELATED TOPICS

P05_01 INVESTIGATION OF RIVER WATERS BY THE METHOD OF WATER SPECTRA. *Stefan Todorov, Lidia Popova*

24 April 2020

THEMATIC SESSION VI

BIODIVERSITY AND CONSERVATION BIOLOGY

9⁰⁰ – 9⁰⁵ Chairperson: *Prof. Vlada Peneva, PhD*


Plenary presentation

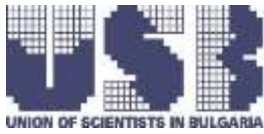
9⁰⁵-9²⁵ EGYPTIAN ENCYCLOPEDIA OF WILD MEDICINAL PLANTS AS A MILESTONE FOR CONSERVATION OF GENETIC RESOURCES AND FOLK MEDICINE *Elsayed Omer* PL06_01

Oral presentations

9²⁵-9³⁵ MONITORING THE IMPACT OF CLIMATE CHANGE ON THE ALPINE LICHEN AND PLANT DIVERSITY – THE GLORIA-BULGARIA PROJECT. *Anna Ganeva, Vladimir Vladimirov, Svetlana Bancheva, Rayna Natcheva, Veselin Shivarov, Malina Delcheva, Elina Yankova & Harald Pauli* L06_01

9³⁵-9⁴⁵ MONITORING WETLAND DYNAMICS USING REMOTE SENSING AND GIS. *Rumiana Vatseva, Davis Dinkov, Stefan Genchev, Kristina Gartsyanova* L06_02

9⁴⁵-9⁵⁵  COMPARATIVE ANALYSIS OF THE MYRIAPODA (DIPLOPODA, CHILOPODA) FAUNA OF THE SHUMEN PLATEAU AND THE MADARA PLATEAU (NORTHEASTERN BULGARIA). *Sevda Hamza, Darina Bachvarova, Aleksandar Doichinov* L06_03



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9⁵⁵-10¹⁰ Discussion

10¹⁰- 10²⁰ Session break


10²⁰- 11⁴⁰ Poster session and Discussion

Chairpersons: Assoc. Prof. Galina Radeva, Assoc. Prof. Marina Stanilova, Assoc. Prof. Kalina Danova

POSTER SESSION

THEMATIC SESSION VI

BIODIVERSITY AND CONSERVATION BIOLOGY

P06_01  **INTEGRATIVE INVESTIGATION ON THE ECOLOGY OF THE BLACK SEA MUSSEL *MYTILUS GALLOPROVINCIALIS* LAM. AND ITS HABITAT.** *Borislava Pavlova, Sevginar Ibryamova, Nina Arhangelova, Dimitar Dimitrov, Radoslav Ivanov, Nesho Chipev, Nikolay Natchev, Tsvetoslava Ignatova-Ivanova*


P06_02 ***ALKANNA TINCTORIA*: AN APPROACH TOWARD *EX SITU* CULTIVATION.** *Boryanka Traykova, Irena Grigorova, Marina Stanilova, Emil Molle, Elina Yankova-Tsvetkova*


P06_03 ***HIERACIUM PILIFERUM* AGG. (*ASTERACEAE*), THE FIRST RECORD IN THE BULGARIAN FLORA.** *Vladimir Vladimirov*

P06_04 **STRUCTURE AND COMPOSITION OF THE AMPHIBIANS AND REPTILES, ACCIDENTALLY FALLING IN PITFALL TRAPS DURING STUDIES OF THE EPIGEAL FAUNA.** *Ivo T. Dobrinov, Teodora M. Teofilova, Nikolay D. Kodzhabashev*

P06_05 **ASSESSMENT OF MARINE CETACEAN POPULATIONS IN BULGARIAN BLACK SEA IN 2017 ACCORDING TO INDICATORS OF THE EU MARINE STRATEGY FRAMEWORK DIRECTIVE.** *Marina Panayotova, Radoslava Bekova, Bogdan Prodanov*

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P06_06  RECENT OBSERVATIONS ON THE SIZE STRUCTURE OF *CHAMELEA GALLINA* AND *DONAX TRUNCULUS* IN THE BULGARIAN BLACK SEA AS STATUS INDICATORS OF COMMERCIALY EXPLOITED SHELLFISH UNDER THE MARINE STRATEGY FRAMEWORK DIRECTIVE (MSFD). Mediya Gumus, *Valentina Todorova, Marina Panayotova*

P06_07  BIO-ECOLOGICAL CHARACTERISTICS AND SIZE-AGE CLASSIFICATION OF THE ALPINE NEWT (*ICHTHYOSAURA ALPESTRIS* (LAURENTI, 1768) DURING THE BREEDING SEASON IN REPRESENTATIVE REGIONS FOR BULGARIA. *Teodora M. Teofilova, Pencho G. Pandakov, Nikolay D. Kodzhabashev*

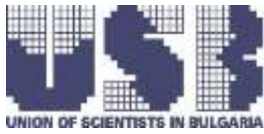
P06_08 POPULATION OF THE FLATHEAD GREY MULLET (*MUGIL CEPHALUS*, LINNAEUS 1758) FROM THE BAY OF BURGAS, BULGARIAN BLACK SEA COAST. Radoslava Bekova, *Marina Panayotova, Bogdan Prodanov*

P06_09 RELATIONSHIPS BETWEEN SIZE, WEIGHT, AGE AND FECUNDITY OF THE *CHELON AURATUS* AND *CHELON SALIENS* (MUGILIDAE) FROM THE BULGARIAN BLACK SEA COAST. Radoslava Bekova, *Marina Panayotova, Galerida Raikova-Petrova, Bogdan Prodanov*

P06_10  EFFECT OF AGRICULTURAL LANDSCAPE HETEROGENITY ON BREEDING BIRD COMMUNITIES IN BULGARIA. Sylvia Dyulgerova, *Simeon Lukanov, Ina Aneva*

P06_11  DIETARY ANALYSIS OF WINTERING GROUPS OF LONG-EARED OWLS (*ASIO OTUS*, LINNAEUS, 1758) IN THE REGION OF SILISTRA (NE BULGARIA). Stela Dipchikova, *Teodora M. Teofilova, Nikolay Kodzhabashev*

P06_12 MACROPTEROUS GROUND BEETLES (COLEOPTERA: CARABIDAE) PREVAIL IN EUROPEAN OILSEED RAPE FIELDS. Teodora Teofilova, *Anja Schmidt, Tibor Hartel, Daniel Ston, Vlada Peneva, Josef Settele*



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P06_13  **STATUS AND TREATS OF THE POPULATIONS OF
ORCHIS PROVINCIALIS IN MT RHODOPES, BULGARIA. *Andrey
Popatanasov***

11⁴⁰ CLOSING PROCEDURE - *Prof. Stephka Chankova PhD*