

USB - SECTION BIOLOGY
**INSTITUTE OF BIODIVERSITY AND
ECOSYSTEM RESEARCH – BAS**



SEMINAR OF ECOLOGY - 2017
WITH INTERNATIONAL PARTICIPATION
10th ANNIVERSARY
27-28 April 2017



Програма/Program
Абстракти/Abstracts





10TH ANNIVERSARY
“SEMINAR OF ECOLOGY – 2017”
WITH INTERNATIONAL PARTICIPATION

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PROGRAM

27 April 2017

8⁰⁰ - 9⁰⁰ Registration (IBER-BAS)

9⁰⁰ - 10⁰⁰ Opening Ceremony

Family photo

THEMATIC SESSION

BIODIVERSITY AND CONSERVATION BIOLOGY

Chairman: Akad. Atanas Atanasov and Prof. Boyko Georgiev

Plenary presentations

10⁰⁰-10²⁰- BIO-MONITORING OR MONITORING OF BIODIVERSITY? Yordan Uzunov-
PL01_01

10²⁰-10⁴⁰- DRONES WITH ON-BOARD SENSORS AND FREELY AVAILABLE, UP-TO-DATE SATELLITE MULTISPECTRAL DATA HAVE CHANGED THE POSSIBILITIES FOR ECOSYSTEM ANALYSES IN BULGARIA Valko Biserkov- **PL01_02**

Oral presentations

10⁴⁰-10⁵⁰- IMPACT OF PASTORALISM ON BIODIVERSITY IN THE CENTRAL BALKAN NATIONAL PARK'S TREELESS ZONE Dimitar Ragyov, Yordan Koshev, Rummyana Kostova, Tsvetoslav Mihovski, Evgeni Chehlarov, Kiril Vassilev, Borislav Naumov, Iva Apostolova, Tsvetelina Terzijska, Anna Ganeva, Borislav Guéorguiev, Valko Biserkov, Atanas Kirilov, Elena Ivanova, Magdalena Kircheva, Mariela Karapavlova, Rashid Rashid- **L01_01**

10⁵⁰-11¹⁰ Discussion

11¹⁰-11³⁰ - Coffee break

11³⁰-11⁴⁰- GENETIC DIVERSITY AND POPULATION DIFFERENTIATION OF CENTAUREA PSEUDAXILLARIS (ASTERACEAE), A RARE AND ENDEMIC PLANT IN BULGARIA Galya Petrova, Stefan Petrov, Svetlana Bancheva- **L01_02**

11⁴⁰-11⁵⁰- DISTRIBUTION OF LOTUS SPECIES IN BULGARIA AND ANALYSIS OF THEIR ECOLOGICAL CHARACTERISTIC Kiril Vassilev, Viktoriya Koleva, Mariya Georgieva, Iliana Dzhovanova, Media Gumus, Evelin Totev, Borislav Tsvetanov, Yusuf Ayan, Plamena Vassileva, Hristo Pedashenko, Antoaneta Petrova, Nikolay Velev- **L01_03**

11⁵⁰-12⁰⁰-  DISTRIBUTION AND CONSERVATION STATUS OF THE TORTOISES TESTUDO HERMANNI AND TESTUDO GRAECA IN PROTECTED AREA „ORANOVSKI PROLOM – LESHKO” (BG0001022), BULGARIA Nevena Malakova, Lidia Sakelarieva, Alexander Pulev- **L01_04**

12⁰⁰-12¹⁰-  THE USE OF BMWP AND ASPT INDICES FOR EVALUATION OF WATER QUALITY OF RIVER OREVOVECHKA REKA (REPUBLIC OF MACEDONIA) Biljana Rimcheska- **L01_05**

12¹⁰-12²⁰  **DEVELOPMENT OF WEB-BASED PORTAL AND INFORMATION SYSTEM FOR THE BIODIVERSITY OF SURFACE WATER BODIES IN THE REPUBLIC OF BULGARIA** *Galia Georgieva, Yordan Uzunov, Marieta Stanachkova, Dimitar Kozuharov, Pencho Yanev, Svetozar Stanachkov* **L01_06**

12²⁰-12³⁰  **DISTRIBUTION AND DENSITY OF THE WILDCAT (FELIS SILVESTRIS SCHR.) IN NATIONAL PARK „PIRIN“, BULGARIA** *Neli Ivanova, Elitsa Popova, Nikola Doykin, Valentin Zlatanov, Diana Zlatanova* **L01_07**

12³⁰-12⁵⁰ **Discussion**

12⁵⁰-13⁵⁰ **Lunch**

THEMATIC SESSION ECOSYSTEM RESEARCH, SERVICES AND ECOLOGICAL AGRICULTURE

Chairmen: Prof. Valko Biserkov and Assos.Prof. Ventsislav Karamfilov

Plenary presentations

13⁵⁰-14¹⁰ **ECOSYSTEM SERVICES AND CLIMATE CHANGE OR WHAT IS THE COST OF DOING NOTHING AT ALL** *Svetla Bratanova-Doncheva, Nesho Chipev*- **PL03_01**

14¹⁰-14³⁰ **THE INNOVATIONS IN ORGANIC FARMING – PROBLEMS AND PERSPECTIVES** *Atanas Atanasov, Maria Shishiniova, Goritsa Rakleova, Mariana Vlahova, Ivelin Panchev, Ventsislav Bardarov, Radoslav Russev*- **PL03_02**

Oral presentations

14³⁰-14⁴⁰ **ECOLOGICAL EFFECTS OF THE CHANGE IN THE STRENGTH OF PRESSURES FROM A LOCAL POINT SOURCE OF ANTHROPOGENIC EUTROPHICATION IN A COASTAL ECOSYSTEM. A MODEL STUDY IN SOZOPOL BAY, BLACK SEA** *Dimitar Berov, Ventsislav Karamfilov*-**L03_01**

14⁴⁰-14⁵⁰  **THE CASE OF AIRSOFT GAMES IN MALA PLANINA AS AN UNCONVENTIONAL CULTURAL ECOSYSTEM SERVICES USE** *Borislav Grigorov, Assen Assenov*- **L03_02**

14⁵⁰-15⁰⁰  DRIVERS OF CHANGES IN HIGH MOUNTAIN ECOSYSTEMS CASE STUDY: RILA HIGH MOUNTAIN ECOSYSTEMS Kostadin Katrandzhiev, Svetla Bratanova-Doncheva, Gergana Georgieva- L03_03

15⁰⁰-15²⁰ Discussion

15²⁰-15⁴⁰-Coffee break

THEMATIC SESSION LANDSCAPE ECOLOGY

Chairman: Prof. Svetlana Bancheva and Assoc. Prof. Assen Assenov

Plenary presentations

15⁴⁰-16⁰⁰ - CHALLENGES IN BIOGEOGRAPHY DEVELOPMENT Assen Assenov-PL04_01

Oral presentations

16⁰⁰-16¹⁰ - BRIDGING BETWEEN PHYSICAL GEOGRAPHY AND OCEANOGRAPHY: THE SCIENCE OF SEASCAPE ECOLOGY Iliyan Kotsev- L04_01

16¹⁰-16³⁰ Discussion

16³⁰-18⁵⁰ Poster sessions (*BIODIVERSITY AND CONSERVATION BIOLOGY; ECOSYSTEM RESEARCH, SERVICES AND ECOLOGICAL AGRICULTURE; LANDSCAPE ECOLOGY*) and Discussion

Chairmen: Prof. Elisaveta Stoimenova and Assoc. Prof. Galina Radeva

POSTER SESSION BIODIVERSITY AND CONSERVATION BIOLOGY

P01_01 FIRST REPORT OF DIATRYPELLA MALALEUCA (XYLARIALES) IN BULGARIA
Dimitar Stoykov

P01_02 RECENT FINDS OF LOBARIA PULMONARIA AND L. SCROBICULATA IN BULGARIA Dimitar Stoykov

 **P01_03 ACUTE AND CHRONIC TOXICITY OF CADMIUM (CD) AND POLYAROMATIC HYDROCARBONS (PAH) ON ZEBRA MUSSEL (DREISSENA POLYMORPHA PALLAS, 1771)** Vesela Yancheva, Elenka Georgieva, Stela Georgieva, Vesela Tsvetanova, Kostadinka Todorova, Iliana Velcheva

P01_04 NEW RECORDS OF HYPOGEOUS FUNGI FROM BULGARIA Boris Assyov, Monica Slavova

P01_05 BALKAN ENDEMIC PLANT LATHRAEA RHODOPEA ON MT FALAKRON, NORTH-EASTERN GREECE Asen Asenov

 **P01_06 NEST-SITE SELECTION OF LONG-LEGGED BUZZARD (BUTEO RUFINUS) IN THE BALKAN MOUNTAINS** Nadejda Djorgova, Dimitar Ragyov, Borislav Naumov, Vulko Biserkov, Boris Nikolov

P01_07 TRANSPOSABLE ELEMENT-ASSOCIATED POLYMORPHISMS OF ARABIDOPSIS THALIANA ECOTYPES Mladen Naydenov, Elena Apostolova, Nikolaj Anachkov, Vesselin Baev, Mariyana Gozmanova, Galina Yahubyan

 **P01_08 EX VITRO ADAPTATION OF IN VITRO CULTURES OF ARTEMISIA ERIANTHA TEN. PLANTS** Gabriela Decheva, Mariya Rogova, Lubov Hristova, Veneta Kapchina-Toteva

 **P01_09 BREEDING DENSITY AND HABITAT PREFERENCES OF SOMBRE TIT (POECILE LUGUBRIS) IN A KARST ENVIRONMENT** Marta Dimitrova, Mattia Brambilla, Boris Nikolov

 **P01_10 CUCKOO BUMBLEBEES IN BULGARIA** Bilyana Stoykova, Albena Lapeva-Gjonova

P01_11 ONE NEW GENUS OF ORDER DORYLAIMIDA (NEMATODA) FROM MARITIME ANTARCTIC Milka Elshishka, Stela Lazarova, Georgi Radoslavov, Peter Hristov, Vlada K. Peneva

 **P01_12 FIRST RECORD OF ANT-ATTENDED JUMPING PLANT-LICE ERYNGIOFAGA LOEWIANA (HEMIPTERA: PSYLLOIDEA) IN BULGARIA** Ilia Gjonov, Albena Lapeva-Gjonova, Monica Pramatarova

P01_13 DISTRIBUTION OF SANGUISORBA SPECIES IN BULGARIA AND ANALYSIS OF THEIR ECOLOGICAL CHARACTERISTIC Kiril Vassilev, Viktoriya Koleva, Mariya Georgieva, Iliana Dzhovanova, Media Gumus, Evelin Totev, Borislav Tsvetanov, Yusuf Ayan, Plamena Vassileva, Hristo Pedashenko, Antoaneta Petrova, Nikolay Velev

 **P01_14 COMPARATIVE ANALYSES OF FLAVONOIDS IN ROOTS OF THREE BULGARIAN AND ONE UKRAINIAN GLYCYRRIZA GLABRA L. POPULATIONS** Asya Kozhuharova, Milena Nikolova, Marina Stanilova

 **P01_15 POLLEN MORPHOLOGY OF SOME SPECIES FROM GENUS SILENE L. (CARYOPHYLLACEAE)** Atanas Tanev, Dolja Pavlova

 **P01_16 WHAT DO WE KNOW ABOUT VEGETATION AND HABITAT DIVERSITY OF ELIN PELIN MUNICIPALITY?** Mediya Gumus, Gana Gecheva, Nikolay Velev, Kiril Vassilev

P01_17 FIELD RELEASE OF ENTOMOPHAGA AULICIAE (ENTOMOPHTOROMYCOTA, ENTOMOPHTORALES) FOR CONTROL OF BROWN TAIL MOTH EUPROCTIS CHRYSORRHOEA (LEPIDOPTERA, EREBIDAE) Daniela Pilarska, Pencho Dermendzhiev, Rumen Nachev, Maria Dobрева

 **P01_18 BIOCONSERVATION STATUS OF THE CRITICALLY ENDANGERED ORCHIDS IN BULGARIA** Andrey Popatanasov

 **EP01_01 COLEOPTERA SPECIES OF SKOPJE CITY AND THE SURROUNDING AREA** Radmila Blazhevskа, Aleksandra Cvetkovska-Gjorgjievska, Dana Prelić, Slavčo Hristovski, Julijana Arsovska, Jelena Hinić

ECOSYSTEM RESEARCH, SERVICES AND ECOLOGICAL AGRICULTURE

P03_01 THE EFFECT OF FOLIAR TREATMENT OF SPRAY CARNATION WITH THE BIOMINERAL FERTILIZER PLANTAGRA Bistra Atanassova, Maria Yovkova

 **P03_02 URBAN ECOSYSTEMS IN PLOVDIV PROVINCE: ASSESSMENT AND MAPPING OF PROVISIONING SERVICES RELATED TO GROUNDWATER** Zvezdelina Aydarova, Bilyana Borisova, Miglena Zhiyansky, Stoyan Nedkov, Mariyana Nikolova

P03_03 A RAPID METHOD FOR VULNERABILITY ASSESSMENT OF COASTAL PLANT COMMUNITIES FROM FLOODING CAUSED BY UNUSUAL STORMS Stoyan Vergiev, Mariana Filipova-Marinova, Ekaterina Trifonova, Iliyan Kotsev

 **P03_04 MACROPHYTE COMPOSITION IN INLAND WETLANDS IN NORTHERN BULGARIA** Borislava Gyosheva, Vladimir Valchev, Nevena Ivanova

LANDSCAPE ECOLOGY

P04_01 ENVIRONMENTALLY RELEVANT ORGANIC COMPOUNDS FROM MARISA EAST DUMPS *A. Kosateva, M. Stefanova, Z. Milakovska, S.P. Marinov*

 **P04_02 LAND COVER CLASSIFICATION OF SOUTHERN KRAISHTA REGION USING SATELLITE IMAGERY** *Petko Bozhkov*

28 April 2017

THEMATIC SESSION BIOTIC AND ABIOTIC IMPACT OF THE LIVING NATURE AND MECHANISMS OF ADAPTATION

Chairmen: Prof. Stephka Chankova and Prof. Snezhana Grozeva

Plenary presentations

9⁰⁰-9²⁰ THE EXOGENOUS FACTORS AND CARCINOGENESIS *Margarita Topashka-Ancheva-PL02_01*

Oral presentations

9²⁰-9³⁰ PESTICIDES - PERSISTENT ORGANIC POLLUTANTS IMPACT ON THE ENVIRONMENT AND HUMAN HEALTH *Irena Bogoeva- L02_01*

9³⁰-9⁴⁰  **VARIABILITY OF PSII FUNCTIONALITY AND CHLOROPLAST MEMBRANE LIPIDS OF SOME HALOPHYTIC AND GLICOPHYTIC REPRESENTATIVES FROM GENUS LACTUCA (ASTERACEAE)** *Lilia Angelova, Albena Ivanova, Dimitrina Koleva, Svetlana Momchilova, Sabina Taneva, Liliana Maslenkova- L02_02*

9⁴⁰-9⁵⁰  **IMPACT OF LIGHT STRESS AND SALINITY ON THE SPECTRAL PROPERTIES OF PHOTOSYNTHETIC APPARATUS IN PAULOWNIA** *Stefanov Martin, Yotsova Ekaterina, Markovska Yuliana, Apostolova Emilia- L02_03*

9⁵⁰-10⁰⁰  **INFLUENCE OF HEAVY METALS ON THE PHOTOSYNTHETIC APPARATUS OF CHLORELLA VULGARIS** *Ekaterina Yotsova, Martin Stefanov, Anelia Dobrikova, Emilia Apostolova- L02_04*

10⁰⁰-10¹⁰ ADAPTIVE CHANGES IN THE STRUCTURE AND THE FUNCTIONAL PERFORMANCE OF PHOTOSYNTHETIC APPARATUS OF MEDICINAL PLANT

PETASITES HYBRIDUS FROM DIFFERENT HABITATS *Vesela Yordanova, Albena Ivanova, Albena Momchilova, Svetlana Momchilova, Dimitrina Koleva, Liliana Maslenkova-* **L02_05**

10¹⁰-10²⁰  CONTEMPORARY CONCEPTS IN THE ECOTOXICOLOGY OF CADMIUM (CD) IN TERRESTRIAL ECOSYSTEMS AND ITS BIOMONITORING IN TERRESTRIAL VERTEBRATES *Peter Ostoich, Michaela Beltcheva, Roumiana Metcheva –* **L02_06**

10²⁰-10³⁰ IMPACT OF BOTTOM SUBSTRATE AND ORGANIC QUANTITY IN SEDIMENTS ON TROPHIC STRUCTURE OF THE RIVER MACROZOOBENTHOS *Maria Kerakova, Emilia Varadinova-* **L02_07**

10³⁰-10⁵⁰ Discussion

10⁵⁰-11¹⁰ Coffee break

11¹⁰-11²⁰  HYPOXIA INDUCED FISH KILLS IN VARNA LAKE, BULGARIA. ASSESSMENT OF DEAD FISH BIOMASS AND DRIVING FACTORS FOR FISH MORTALITY *Stefan Kazakov, Detelina Belkinova, Rumen Mladenov, Plamen Stojanov, Luchezar Pehlivanov-* **L02_08**

11²⁰-11³⁰ THE ASSOCIATION OF ANEMIA AND CONCENTRATION OF LEAD, COPPER, ZINC AND IRON IN CHILDREN FROM ENVIRONMENTS CONTAMINATED WITH HEAVY METALS *Snezana Veselinovska-***L02_09**

11³⁰-11⁴⁰ DNA SUSCEPTIBILITY OF CHLAMYDOMONAS REINHARDTII AND SACCHAROMYCES CEREVISIAE TO NURELLE D *Petya Parvanova, Teodora Todorova, Daniela Miteva, Zhana Mitrovska and Stephka Chankova* **L02_10**

11⁴⁰-11⁵⁰ PHENOL DERIVATIVES DEGRADATION BY FREE LIVING AND ENTRAPPED IN CRIOGELS ENVIRONMENTAL BACTERIAL STRAINS *Satchanska G., Topalova Y., Dimkov R., Groudeva V., Petrov P., Tsvetanov Ch., Selenska-Pobell S., Golovinsky E. –***L02_11**

11⁵⁰-12⁰⁰ SCREENING FOR GENOTOXITY OF EXTRACTS OF AMARYLLIDACEAE PLANT ON THE CHLAMYDOMONAS REINHARDTII *Petya Parvanova, Zhana Mitrovska, Borianna Sidjimova, Milena Nikolova, Strahil Berkov and Stephka Chankova* **L02_12**

12⁰⁰-12¹⁰  ADAPTIVE POTENTIAL OF TWO PHASEOLUS VULGARIS L. GENOTYPES TO SINGLE AND COMBINED PEG AND UV-B TREATMENTS *Tsveta Angelova and Stephka Chankova-***L02_13**

12¹⁰-12³⁰ Discussion

12³⁰-13³⁰ Lunch

THEMATIC SESSION ECOLOGY AND EDUCATION

Chairman: Prof. Spasimir Tonkov and Prof. Daniela Pilarska

Plenary presentations

13³⁰-13⁵⁰- MODEL FOR ORGANIZING ENVIRONMENTAL EDUCATION THROUGH “REGION FOR KIDS”- A SUCCESSFUL BRAND AT REGIONAL LEVEL Asya Asenova-PL05_01

Oral presentations

13⁵⁰-14⁰⁰-CORRELATION-INTEGRATION METHODOICAL SYSTEM IN PROCESSING CONTENTS FROM ENVIRONMENTAL EDUCATION DURING ENGLISH LESSONS Snezana Veselinovska, Snezana Kirova- L05_01

THEMATIC SESSION OTHER RELATED TOPICS

Chairman: Prof. Spasimir Tonkov and Prof. Daniela Pilarska

Oral presentations

14⁰⁰-14¹⁰-WATER MEMORY DISPLAYED BY THE CONTACT ANGLE DISTRIBUTIONS OF EVAPORATING DROPS Lidia Popova, Stefan Todorov L06_01

14¹⁰-14³⁰ Discussion

14³⁰-14⁵⁰-Coffee break

14⁵⁰-17⁰⁰ Poster sessions (*BIOTIC AND ABIOTIC IMPACT OF THE LIVING NATURE AND MECHANISMS OF ADAPTATION; ECOLOGY AND EDUCATION; OTHER RELATED TOPICS*) and Discussion

Chairmen: Prof. Mariyana Lyubenova and Assoc. Prof. Marina Stanilova

POSTER SESSION

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

 **P02_01 ASSESSMENT OF THE IMPACT OF OF SALINITY ON THE GROWTH AND ANTIOXIDANT ACTIVITY OF TWO LYCIUM SPECIES** Velimira Dimitrova, Teodora Georgieva, Maria Geneva, Yuliana Markovska

P02_02 RESPONSE OF GLUTATHIONE REDUCTASE TO OXIDATIVE STRESS IN INTACT PEA PLANTS Elena Shopova, Vera Alexieva, Valentina Bubova

 **P02_03 PROBING THE PHYCOBILISOME STABILITY IN SYNECHOCYSTIS CELLS BY MICROCALORIMETRY** Nia Petrova, Svetla Todinova, Tomas Zakar, Tünde Tóth, Stefka Taneva, Zoltan Gombos, Sashka Krumova

 **P02_04 IMPACT OF GROWTH REGULATORS ON THE ANTIOXIDATIVE CAPACITY OF PISUM SATIVUM PLANTS** Marina Alexeeva, Ivalena Ilieva, Miroslava Zhiponova, Veneta Kapchina-Toteva, Ganka Chaneva

P02_05 ENHANCEMENT OF SEED GERMINATION AND GROWTH OF ECHINACEA PURPUREA (ASTERACEAE) Boryanka Traykova, Marina Stanilova

P02_06 THE IMPACT OF SEA WATER IMMERSION ON THE VIABILITY OF PSAMMOPHILOUS SPECIES GALILEA MUCRONATA (L.) PARL. Stoyan Vergiev

 **P02_07 PINUS NIGRA L. AS A BIOMONITOR OF AIR POLLUTION IN URBAN AREAS (PLOVDIV, BULGARIA)** Zlatovesa Hristozova, Megi Dakova, Kostadinka Todorova, Bogdan Nikolov, Iliana Velcheva, Slaveya Petrova

 **P02_08 DISTRIBUTION OF BOTTOM FAUNA UNDER FISH FARMING CAGES IN KARDZHALI DAM** Stefan Kazakov, Maria Yankova, Angelina Ivanova, Kostadin Dochin, Georgi Rusenov, Maria Gevezova-Kazakova, Angel Zaikov, Tanya Hubenova

 **P02_09 ACCUMULATED HEAVY METALS AND OXIDATIVE STATUS IN TISSUES OF THE BLACK SEA MUSSEL (MYTILUS GALLOPROVINCIALIS LAMARK, 1819)** Lachezar Yakimov, Albena Alexandrova, Elina Tsvetanova, Almira Georgieva, Nesho Chipev

P02_10 CYTOTOXIC ACTIVITY OF SIDERITIS SCARDICA EXTRACTS AND FRACTIONS ON HUMAN BREAST ADENOCARCINOMA CELL LINE Petya Koleva, Elena Stoyanova, Kalina Alipieva, Ina Aneva, Ljuba Evstatieva, Kalina Danova

P02_11 ROLE OF GLUTATHIONE IN CELL RESPONSE TO OXIDATIVE STRESS IN YEAST *Anna Tomova, Ventsislava Petrova*

 **P02_12 CLIMATE CHANGES IMPACT ON THE POPULATIONS OF THE CRITICALLY ENDANGERED ORCHIDS IN BULGARIA** *Andrey Popatanasov*

EP02_01 BIOMASS OF PINE FORESTS IN THE NORTH-EAST OF EUROPEAN PLAIN IN DEPEND ON SOIL MOISTURE CONDITIONS *Andrey Osipov, Ivan Kutjavin*

ECOLOGY AND EDUCATION

P05_01 CONTENT OF RADIOACTIVE ELEMENTS IN SEDIMENTS OF THE NORTHERN BLACK SEA COAST OF BULGARIA FOR THE PERIOD 2010-2016 *Ivanka Yordanova, Donka Staneva, Eliza Pavlova*

P05_02 AGALMATIUM FLAVESCENS (HEMIPTERA, ISSIDAE) AND CAMPONOTUS AETHIOPS (HYMENOPTERA, FORMICIDAE) – AN UNKNOWN TROPHOBIOTIC ASSOCIATION *Ilia Gjonov, Albena Lapeva-Gjonova*

OTHER RELATED TOPICS

P06_01 DRY MASS YIELD AND AMOUNT OF FIXED NITROGEN IN SOME FORAGE LEGUME CROPS AFTER TREATMENT WITH ORGANIC FERTILIZER HUMUSTIM *Viliana Vasileva, Todor Kertikov, Anna Ilieva*

P6_02 ANTIOXIDANT PROPERTIES OF CANCER PAGURUS HEMOCYANIN *Yuliana Raynova, Milka Mileva, Ivan Kindekov, Dimo Krastev, Krassimira Idakieva*

17⁰⁰-17³⁰Film

17³⁰ AWARDS AND CLOSING PROCEDURE OF THE 10TH ANNIVERSARY “SEMINAR OF ECOLOGY - 2017” WITH INTERNATIONAL PARTICIPATION

