



PROGRAMME EEST /UTC+3/

Wednesday, May 25th 2022

08:00 - 09:00 Registration

09:00 - 09:10 Welcoming speech and introduction to BULCode project
Georgi Bonchev

09:10 – 12:00 SESSION 1

Chair: Georgi Bonchev

09:10 – 09:30 BIOSCAN Europe
Peter M. Hollingsworth

09:30 – 10:00 Finnish sawflies as a model for tackling a diverse and poorly known insect group using high-throughput DNA barcoding
Marko Mutanen

10:00 – 10:15 Estimating Cecidomyiidae (Diptera) species richness in Finland using high-throughput DNA barcoding
Niina Kiljunen

10:15 – 10:20 Q&A

10:20 – 10:50 Coffee-break and a family photo

10:50 – 11:05 Peering into the darkness: the GBOL III-Dark Taxa project at the Bavarian State Collection of Zoology
Caroline Chimeno

11:05 – 11:20 First results on the genetic variation of the Bulgarian populations of *Morimus asper funereus* (Mulsant, 1862) (Coleoptera: Cerambycidae)
Rumyana Kostova

11:20 – 11:35 Multilocus DNA barcoding in pollinators – case study on *Merodon* hoverflies
Ljiljana Šašić Zorić

11:35 – 11:50 The evolution of DNA barcoding for food quality, safety and traceability: cases studies from Italy
Jessica Frigerio

11:50 – 12:00 Q&A

12:00 – 13:00 *Lunch*

13:00 – 15:30 SESSION 2

Chair: Helena Korpelainen

- 13:00 – 13:30 Small, but important, players in the global barcoding field (lessons learned from the barcoding Slovak freshwater biota)
Fedor Čiampor Jr
- 13:30 – 13:45 Massive DNA barcode-based survey provides novel insight into aquatic invertebrate diversity and a new perspective for the protection of the ancient Skadar Lake basin
Michał Grabowski
- 13:45 – 14:00 Towards filling the gap - building a freshwater macroinvertebrate DNA barcode reference library for Malta
Tomasz Rewicz
- 14:00 – 14:15 Integrative approach to adaptive radiation in ancient lakes: evolutionary genetics of Lake Ohrid Gammarus species flock and community barcoding - project progress report
Tomasz Mamos
- 14:15 – 14:25 Q&A
- 14:25 – 14:40 Molecular taxonomy of the endemic Ponto-Caspian amphipods shows multiple discrepancies between morphological and molecular taxonomic units
Denis Copilaş-Ciocianu
- 14:40 – 14:55 Genetic diversity of marine jellies from the Azores accessed with new multi-marker MinION metabarcoding approach
Carlos J. Moura
- 14:55 – 15:10 Managing human-mediated range shifts: understanding spatial, temporal and genetic variation in marine non-native species
Marc Rius
- 15:10 – 15:25 Do pseudogenes pose a problem for metabarcoding marine animal communities?
Jessica A. Schultz
- 15:25 – 15:30 Q&A

15:30 – 16:00 Coffee-break

16:00 – 18:20 SESSION 3

Chair: Peter M. Hollingsworth

- 16:00 – 16:30 BIOSCAN – Revealing the Diversity, Dynamics, Interactions of Life,
Paul Hebert
- 16:30 – 16:50 Progress Towards the Assembly of a DNA Barcode Reference Library for Bulgarian Fauna
Gergin Blagoev
- 16:50 – 17:30 DNA barcoding and the BioAlfa process to facilitate the DNA barcoding of all of Costa Rica, embedded within BIOSCAN
Daniel Janzen
- 17:30 – 17:45 Full chloroplast sequencing using genome skimming for novel plant DNA barcode discovery in Amaranths
Leonardo Galindo-González

17:45 – 18:00 COI database from BOLD, NCBI and custom sequences
Emese Megléc

18:00– 18:15 Unlocking the potential of insect biomonitoring surveys using DNA-metabarcoding: Examples from two nationwide monitoring schemes in the UK
Dimitrios Petsopoulos

18:15 – 18:20 Q&A

18:20 – 19:30 POSTER SESSION

P01 Let's talk about the (lady)birds and the bees: how insects can whisper a multitude of stories
Physilia Chua

P02 *Prionchulus muscorum* group (Nematoda, Mononchidae) from riparian habitats in Bulgaria
Stela Dipchikova

P03 MEMO and MEMO+: Identification of introduction pathways and surveillance of exotic *Aedes* mosquito species in Belgium
Ann Vanderheyden

P04 Inventory and analysis of diversity for stoneflies (Plecoptera), caddisflies (Trichoptera) and scorpionflies (Mecoptera) in Medvednica Nature Park using classical taxonomy and DNA barcoding
Dora Kermek

P05 COins: a curated reference database of COI sequences for insect species identification through DNA metabarcoding
Giulia Magoga

P06 Unveiling the diversity of the deep-sea pedunculate barnacles *Poecilasma* (Cirripedia: Thoracica) from the Gorringe Bank in North-East Atlantic Ocean
Jorge Lobo-Arteaga

P07 DNA barcoding of the Polish epigeal Amphipoda
Hedvig Csapó

P08 Genetic diversity in high-mountain *Thymus* species in Bulgaria revealed by ISSR genetic markers
Petar Zhelev

P09 DNA Barcoding Confirmed first record of the Clubfoot sillago *Sillaginopodys chondropus* (Bleeker, 1849) (Perciformes: Sillaginidae) from the Iranian coast of Oman Sea
Mohammad Sadegh Alavi-Yeganeh

P10 First report of microsporidian parasites infecting *Gammarus* species from ancient Lake Ohrid
Serena Mucciolo

P11 First data on DNA barcoding of representatives of the genus *Centaurea* s.l. (Asteraceae) from Bulgaria
Svetlana Bancheva

P12 Phylogenetic identification of Balkan endemic *Stachys* species and genomic stability during ex vitro conservation
Desislava Mantovska

P13 Catmint (*Nepeta nuda* L.) phylogenetics defined by nuclear and chloroplast DNA barcodes
Georgi Bonchev

P14 Self-organized map as a powerful tool for population structure analysis of Bulgarian Bread Wheat
Vladimir Aleksandrov

- P15 Genetic diversity as a paramount factor determining wheat adaptation to drought stress
Mariyana Georgieva
- P16 Linking DNA methylation determinants to chromatin organization following high temperature stress
Dimitar Todorov
- P17 Biotechnological approaches for conservation of endangered medicinal plants *Rhodiola rosea* and *Rhodiola kirilowii*
Krasimira Tasheva
- P18 Molecular identification and phylogenetic relationships of *Colletotrichum* isolates pathogenic on cultivated plants in Bulgaria
Vasilissa Manova
- P19 Impact of heavy metal pollution on soil bacterial community structure in the area of a non-ferrous metal processing plant, Southern Bulgaria
Galina Radeva
- P20 Bacterial and fungal inhabitants of iron ochres precipitated from As and Sb contaminated waters at several abandoned mining deposits in Slovakia
Ivona Kautmanová
- P21 Diversity of fungal communities in long-term copper contaminated soils
Michaella Petkova
- P22 Sources of modularity in bacterial co-occurrence network along pH and C:N gradients
Niloufar Hagh-Doust
- P23 Identification of fungal taxa with pathogenic potential in soil samples from Perunika Glacier's newly formed forefields - Livingston Island, Antarctica
Yordan Hodzhev
- P24 Barcoding in Bright-Spored and Dark-Spored Myxomycetes: No Universal Threshold
Iryna Yatsiuk
- P25 Metabarcoding reveals high-resolution biogeographic and metaphylogeographic patterns through the Atlanto-Mediterranean transition
Adrià Antich Gonzalez
- P26 How dark of a taxon is Microgastrinae (Braconidae) really?
Amelie Höcherl
- P27 How does urbanisation impact pond biodiversity in a geographical gradient?
Monika Baranowska
- P28 The use and challenges of DNA barcoding method
Dana Szabóová
- P29 Scientific validation of powdered immunomodulatory products in trade by DNA barcodes to ensure consumer safety
Nithaniyal Stalin
- P30 Bacterial communities in ballast tanks of cargo vessels - shaped by salinity, treatment and the point of origin of the water but "hatch" its typical microbiome
Helen Tammert

20:00 – 21:30 *Welcome cocktail*

Thursday, May 26th 2022

09:00 - 12:30 SESSION 4

Chair: **Svetlana Bancheva**

- 09:00 – 09:15 The effects of sample age and taxonomic origin on the success of DNA barcoding when using herbarium specimens
Helena Korpelainen
- 09:15 – 09:30 Environmental and biotic signatures on plant communities and plant–microbe associations in Zackenberg valley– an eDNA-based approach
Bastien Parisy
- 09:30 – 10:00 Testing metabarcoding on temperate lake sediments to investigate 31-thousand years of flora changes
Laura Parducci
- 10:00 – 10:15 Simultaneous DNA barcoding of museum specimens using cross-species hybridization capture
Stefanie Agne
- 10:15 – 10:30 Joint Danube Survey 4: Metabarcoding analysis of phytobenthos samples
Kálmán Tapolczai
- 10:30 – 10:35 Q&A

10:35 – 11:05 Coffee-break

- 11:05 – 11:35 DNA-based identification of traded wildlife: Monitoring of terrestrial orchid tubers in trade
Hugo J. de Boer
- 11:35 – 11:50 Honeybees' functions through DNA in honey
Helena Wirta
- 11:50 – 12:05 A research road-map towards a nuclear DNA barcode for plants
Wu Huang
- 12:05 – 12:20 Genome skimming: an efficient extension to conventional DNA Barcodes
Eric Coissac
- 12:20 – 12:30 Q&A
- 12:30 – 13:30 Lunch

13:30 – 15:20 SESSION 5

Chair: **Helena Wirta**

- 13:30 – 14:00 Lessons learned from NorBOL: Opportunities and challenges building reference libraries of marine, freshwater and terrestrial biotas
Torbjørn Ekrem
- 14:00 – 14:30 Achievable near real-time biosphere monitoring of Earth using environmental DNA
Kristy Deiner
- 14:30 – 14:45 Identification of extremophilic microorganisms in four different thermal springs with environmental DNA metabarcoding
Işıl Çelik

14:45 – 15:00 Can we identify freshwater pea clams (*Pisidium* spp.) with novel molecular methods in Sweden?
Sonja Leidenberger

15:00 – 15:15 Strengths and shortcomings of the use of water eDNA metabarcoding for the study of marine benthic communities: effects of marker type and sequencing platform
Xavier Turon

15:15 – 15:20 Q&A

15:20 – 15:50 Coffee-break

15:50 – 16:50 E-POSTER SESSION I

Chair: Ina Aneva

15:50 – 15:55 EP01 Establishment of DNA barcode reference library of Mongolian mammals
Bayarmaa Gun-Aajav

15:55 – 16:00 EP02 DNA barcoding of *Junipeus* L. species in Kazakhstan based on internal transcribed spacer
Shyryn Almerikova

16:00 – 16:05 EP03 Integrated use of BOLD and GenBank databases for further DNA barcoding research
Takeru Nakazato

16:05 – 16:10 EP04 Revealing the soil biodiversity in Hong Kong using a citizen science approach
Wai Lok So

16:10 – 16:15 EP05 Evolutionary history of the plastid genome in *Bromus tomentosus*, an Old-World species in the *Bromus* sect. *Bromopsis*: Evidence for introgressive hybridization
Akram (Saba) Nasiri

16:15 – 16:20 EP06 Environmental DNA: building a reference data library for the ichthyofauna of the São Francisco River basin, Brazil
Kênia Ferreira Camargos

16:20 – 16:25 EP07 Environmental DNA: building a reference genomic library for freshwater fishes of Upper Paraná basin, Brazil
Gabriela Peres

16:25 – 16:30 EP08 DNA barcoding in amphitropical *Larreas* (Zygophyllaceae): a case of hybridization and chloroplast capture in sympatric populations
Lucia Virginia Castello

16:30 – 16:35 EP09 DNA barcoding: a survey of beetles in the Republic of Moldova
Anna Moldovan

16:35 – 16:40 EP10 Unexpected pattern of COI diversity observed within the *Merodon ruficornis* group (Diptera, Syrphidae)
Iva Gorše

16:40 – 16:45 EP11 Integrated molecular approaches for advanced quality assessment of botanicals and derived herbal preparations
Ancuta Cristina Raclariu-Manolica

16:45 – 16:50 EP12 Widening the genetic diversity of bread wheat by the chromosomes transferred from a hybrid wheatgrass *Agropyron glael*
Klaudia Kruppa

17:00-20:00 **Sofia city tour /optional/**

Friday, May 27th 2022

09:00 – 12:30 SESSION 6

Chair: Eero Vesterinen

09:00 – 09:15 Scholarly publication of barcoding data
Lyubomir Penev

09:15– 09:30 Barcodes and DNA Derived Biodiversity Evidence in GBIF
Dmitry Schigel

09:30 – 09:45 Towards accelerated and standardized species descriptions (ASSD) based on DNA barcodes and supplementary data on BOLD
Axel Hausmann

09:45 – 10:00 dnabarcoder: an open-source software package for analyzing and predicting DNA sequence similarity cut-offs for fungal sequence identification
Duong Vu

10:00 – 10:15 Artemis: a web-interface database for the identification of pest and beneficial Arthropods for agriculture in Europe
Jean-Claude Streito

10:15 – 10:25 Q&A

10:25 – 10:55 **Coffee-break**

10:55 – 11:10 Molecular analysis of mucilage formation at Aegean Sea via metabarcoding
Gizem Geçgil

11:10 – 11:25 Long-term management history affects seasonal diet composition of semi-domesticated reindeer
Stefaniya Kamenova

11:25 – 11:40 Notes on the status of the genus *Coomansus* Jairajpuri & Khan, 1977 (Mononchidae, Nematoda)
Vlada Peneva

11:40 – 11:55 Soil biodiversity: microeukaryotes in Alpine mires
Aaron Pérez-Haase

11:55 – 12:10 Factors affecting soil invertebrate biodiversity in agroecosystems of the Po Plain area (Italy)
Matteo Montagna

12:10 – 12:25 Monitoring tropical arthropods in Barro Colorado Island, Panama, using DNA metabarcoding
Daniel Souto-Vilarós

12:25 – 12:30 Q&A

12:30 – 13:30 Lunch

13:30 – 17:20 SESSION 7

Chair: Iryna Yatsiuk

- 13:30 – 13:45 DNA barcoding aids in the understanding of bat species from Malta
Clare Marie Mifsud
- 13:45 – 14:00 Studying the ecological factors underlying a novel tool for wood-inhabiting fungal conservation
Sonja Saine
- 14:00 – 14:15 Using MinION Nanopore sequencing to simultaneously identify multiple, illegally imported wild meat samples in Brussels, Belgium
Ann Vanderheyden
- 14:15 – 14:30 Cytochrome c oxidase subunit 1 (Cox1) gene as a DNA barcode for lobose amoebae (Amoebozoa): emerging problems after eleven years of data and experience accumulation
Alexander Kudryavtsev
- 14:30 – 14:45 Molecular contributions to the conservation of pubescent oak and pedunculate oak forest genetic resources in Romania, Bulgaria and Republic of Moldova
Dragos Postolache
- 14:45 – 15:00 Species and genera discrimination of yeast of the Starmerella clade using DNA barcoding analysis
Roumen Dimitrov
- 15:00 – 15:15 Survey of emerging yeast pathogens circulating in Bulgarian ecosystems
Dilnora Gouliamova
- 15:15 – 15:30 SRAP markers – a robust marker system for analysis of genetic diversity in natural populations and collections of plant genetic resources
Krasimir Rusanov
- 15:30 – 15:40 Q&A
- 15:40 – 16:10 Coffee-break**
- 16:10 – 16:25 DNA barcoding sheds light on hidden biodiversity of pseudoscorpions in Croatia
Dora Hlebec
- 16:25 – 16:40 Environmental DNA based detection and monitoring of alien (invasive) species in the Baltic Sea
Veljo Kisand
- 16:40 – 16:55 Revisiting global biogeography of freshwater microalgae: new insights from molecular data
Teofana Chonova
- 16:55 – 17:10 In vitro and in silico integration of metabarcoding into species-level diatom biomonitoring
Berkay Gülen
- 17:10 – 17:20 Q&A
- 17:20 – 19:00 E-POSTER SESSION II**
Chair: Vasilissa Manova
- 17:20 – 17:25 EP13 Biodiversity of the genus *Trichoderma* (Ascomycota, Fungi) in the Mediterranean region of Croatia
Snjezana Topolovec-Pintaric
- 17:25 – 17:30 EP14 Testing COI primers for ichthyoplankton metabarcoding and their capability to assess local mesozooplankton communities
André O. Ferreira

17:30 – 17:35	EP15	Assessing the seasonal dynamics of zooplankton in a recreational marina of the northwest of Portugal through multi-marker DNA metabarcoding Jorge Moutinho
17:35 – 17:40	EP16	Detection and monitoring of invertebrate non-indigenous species through DNA metabarcoding in a recreational marina of the Northwest of Portugal Fábio G. Amaral
17:40 – 17:45	EP17	Extensive hidden diversity at small scale: the marine invertebrates of Macaronesian islands Pedro Vieira
17:45 – 17:50	EP18	Characterization of arthropod communities by DNA metabarcoding of body remains sieved from wood mould of tree holes Carlos Lopez-Vaamonde
17:50 – 17:55	EP19	Diet analysis with DNA metabarcoding for Antarctic Peninsula seal species Ayşegül Er Gökçe
17:55 – 18:00	EP20	DNA Barcoding as an alternative method for pollinator biomonitoring Metehan Arıkan
18:00 – 18:05	EP21	New insights in the groundwater species diversity of the isopod genus <i>Metastenasellus</i> in Benin and Cameroon Gontran Sonet
18:05 – 18:10	EP22	The Belgian barcoding facility for organisms and tissues of policy concern Kenny Meganck
18:10 – 18:15	EP23	Structure and diversify of soil fungal communities in oil-bearing rose and lavender agroecosystems from the Rose Valley region Lyudmila Lozanova
18:15 – 18:20	EP24	Morphological and molecular characterisation of <i>Labronema magnum</i> Altherr, 1972 (Nematoda: Dorylaimida) from Arctic polar deserts Milka Elshishka
18:20 – 18:25	EP25	DNA barcoding for biodiversity conservation: a case study of insects from the Maltese Islands Clare Marie Mifsud
18:25 – 18:30	EP26	A multi-locus approach to improve discrimination between fish species Noel Vella
18:30 – 18:35	EP27	Endangered genetic diversity of the stone crayfish and noble crayfish revealed by DNA barcoding and species distribution modelling Leona Lovrenčić
18:35 – 18:40	EP28	Molecular Identification of <i>Ocimum tenuiflorum</i> Subtypes Rama and Krishna Tulsi Using Allele-Specific PCR Based on Single Nucleotide Polymorphism Raju Balaji
18:40 – 18:45	Q&A	
18:45 – 19:00		Closing ceremony, Best Poster Award
20:00 – 24:00		<i>Conference dinner</i>