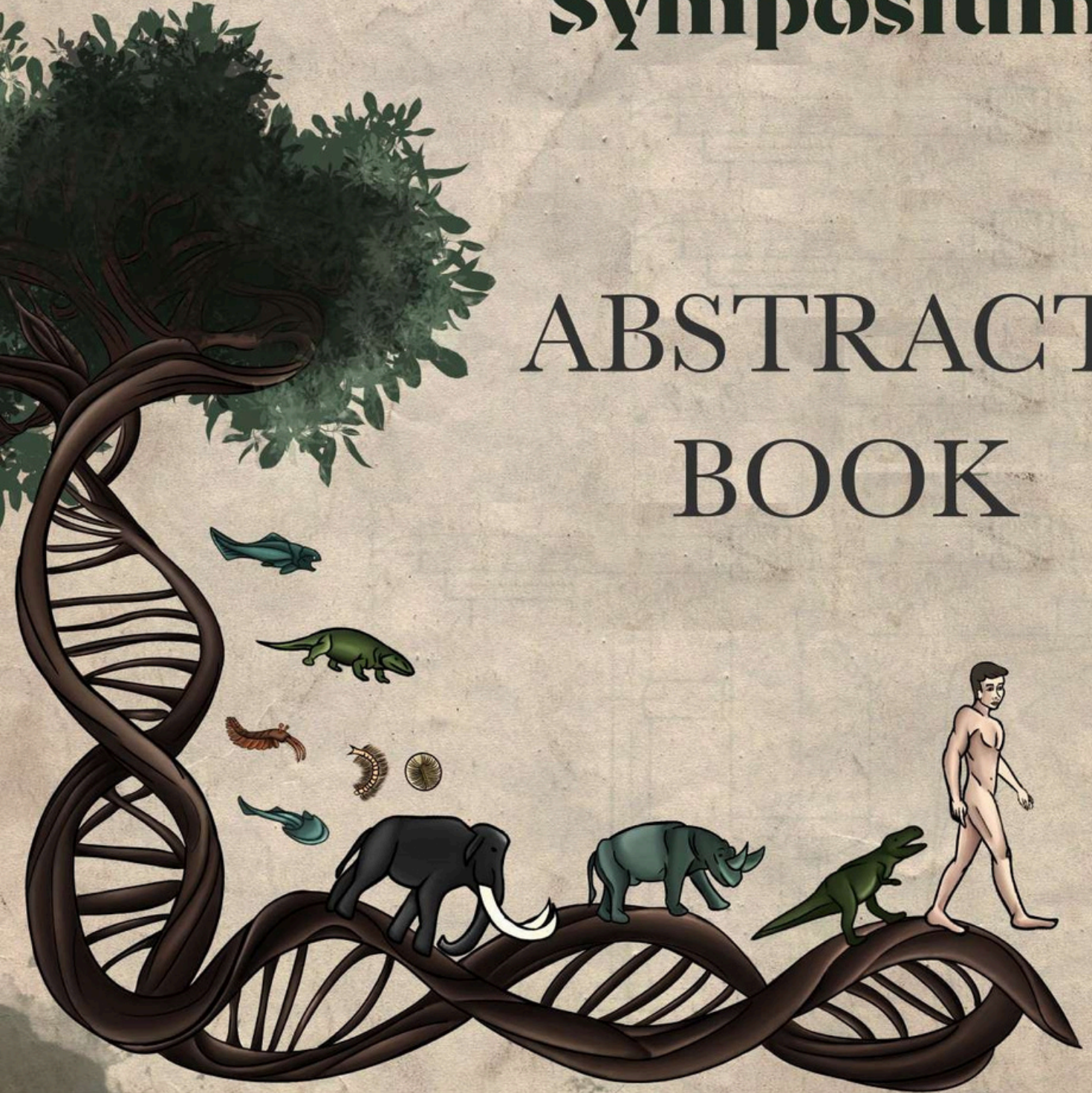


EEBST 2025
11th Ecology and
Evolutionary Biology
Symposium

ABSTRACT
BOOK



THE SCIENTIFIC COMMITTEE

Ünal Akkemik, *Istanbul University-Cerrahpaşa*
Mine Altınlı, *Bernhard Nocht Institute for
Tropical Medicine*
Tuba Bucak, *Aarhus University*
Emrah Çoraman, *Istanbul Technical University*
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Bilgecan Şen, *University of Maryland*
Burcu Tarıkahya Hacıoğlu, *Hacettepe University*
Baran Yoğurtçuoğlu, *Hacettepe University*

THE ORGANIZING COMMITTEE

Anıl Soyumert, *Kastamonu University*
Baran Yoğurtçuoğlu, *Hacettepe University*
Barış Özüdoğru, *Hacettepe University*
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Sibel Küçükıyıldırım, *Hacettepe University*

LOCAL SUPPORT TEAM (HacettepeUniversity)

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Bedirhan Avdancı
Cansu Baran
Şimalnaz Beşyıldız
Özge Çakmak
Özge Heper
Cansu Kılıç
Gülseli Kırgıl
Rüveyda Öğütverici
Berna Yavuz
Ayda Yılmaz
Ata Umut Özsoy
Efekan Tolukan
Sude Yıldırım
Yağmur Nibat
İsa Doğan
Bünyamin Özdemir
Veli Deniz Ünlü
Selen Kırmızı

11TH ECOLOGY AND EVOLUTIONARY BIOLOGY SYMPOSIUM PROGRAM

09.07.2025
WEDNESDAY

- 08:00 - 09:30** REGISTRATION
- 09:30 - 10:00** OPENING CEREMONY
- 10:00 - 11:00** **NATÁLIA MARTÍNKOVÁ - GENOME POLARIZATION: TRACING THE THREADS OF HYBRIDIZATION AND EVOLUTIONARY FLUX**
- 11:00 - 11:30** COFFEE/TEA BREAK
- SESSION 1: POPULATION GENETICS**
- 11:30 - 11:45** AYŞEGÜL ER GÖKÇE - UNCOVERING THE DIET COMPOSITION AND FORAGING ECOLOGY OF FALCO ELEONORAE USING NON-INVASIVE EDNA-BASED PELLET METABARCODING
- 11:45 - 12:00** BAHAR PATLAR - MOISTURE MATTERS MORE THAN HEAT FOR EVOLUTION OF REPRODUCTIVE GENES IN DROSOPHILA
- 12:00 - 12:15** İBRAHİM RAŞİT BİLGİN - THE MITOCHONDRIAL AND DOUBLE DIGEST RESTRICTION-SITE ASSOCIATED DNA SEQUENCING (DDRAD-SEQUENCING) REVEALS ISOLATION AND EXPANSION FROM THE GLACIAL REFUGIA
- 12:15 - 12:30** KUTLU ŞAFAK ALKAN - DEVELOPING CUSTOM SNP PANELS FOR RAPID AND ACCURATE WILDLIFE CONSERVATION GENETICS APPLICATIONS
- 12:30 - 12:45** SAHAR JAVAHARI TEHRANI - UNCOVERING HYBRIDIZATION AND SPECIES BOUNDARIES IN PERIPHERAL POPULATIONS OF THE GREAT TIT (PARUS MAJOR) USING HIGH-RESOLUTION GENOMICS
- 12:45 - 13:00** TONI GOSSMANN - WHY SEX-BASED GENOMIC DIFFERENTIATION SHOULD NOT BE OVERLOOKED IN POPULATION GENETICS
- 13:00 - 14:00** LUNCH
- SESSION 2: POPULATION ECOLOGY**
- 14:00 - 14:15** BERİL TEZEL - MOLECULAR APPROACHES FOR CONSERVATION: EDNA AND METABARCODING INSIGHTS INTO THE STRIPED HYENA POPULATION IN TÜRKİYE
- 14:15 - 14:30** NERGİS BİLGE KARABULUT - GENETIC DIVERSITY PATTERNS IN PHENOLOGICAL TRAITS OF QUERCUS ROBUR L.
- 14:30 - 14:45** KADİRHAN KILINÇ - INFECTED BUT INVESTING: INTERACTIVE EFFECTS OF PARASITEMIA AND FOOD AVAILABILITY ON REPRODUCTION IN GREAT TITS
- 14:45 - 15:00** NURBAHAR USTA - TROJAN FIR UNDER CLIMATE WARMING: A FACILITATOR SPECIES FACING REGENERATION LIMITS
- SESSION 3: AQUATIC ECOLOGY**
- 15:00 - 15:15** ABDULLAH ÖZ - VARIATION IN AQUATIC FOOD WEBS ALONG THE LONGITUDINAL GRADIENT OF A SOUTHERN ANATOLIAN COASTAL RIVER
- 15:15 - 15:30** AYLİN AKKAYA - UNSPOKEN DYNAMICS OF SPERM WHALES (PHYSETER MACROCEPHALUS) IN THE EASTERN MEDITERRANEAN SEA OF TÜRKİYE: GROUP STRUCTURE, SPATIAL-TEMPORAL DISTRIBUTION AND BODY LENGTH
- 15:30 - 15:45** GÜL CANAN YAVUZ - THE EFFECTS OF SALINITY AND HEATWAVE ON ZOOPLANKTON COMMUNITY STRUCTURES, DIVERSITY AND RESOURCE USE EFFICIENCY: SYNCHRONIZED MESOCOSM EXPERIMENTS, TÜRKİYE
- 15:45 - 16:00** İREM GAMZE ARIK - SALINITY-INDUCED SHIFTS IN ZOOPLANKTON COMMUNITIES: INSIGHTS FROM A GRADIENT-BASED MESOCOSM STUDY

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WEDNESDAY

16:00 - 16:30 COFFEE/TEA BREAK

SESSION 4: FLASH TALKS!

16:30 - 17:30

ARDA SEVKAR - THE MINI YET MIGHTY STAPES: A SUPERIOR DNA SOURCE THAN THE COCHLEAR POWDER

ATAKAN YILDIZ - THE ROLE OF SOIL MICROBIOTA IN ECOSYSTEM HEALTH AND SUSTAINABLE TEA CULTIVATION: INSIGHTS FROM EDNA AND METAGENOMIC APPROACHES

BEDİRHAN AVDANCI - COMMUNITY COMPOSITION AND RESISTANCE LEVELS OF SOIL BACTERIA AND FUNGI IN A MEDITERRANEAN FOREST UNDER VARYING WILDFIRE SEVERITIES

ELİFNAZ EKER - UNRAVELING ROMAN MOBILITY: ARCHAEOGENOMIC INSIGHTS FROM ASIA MINOR TO THE ITALIAN PENINSULA

FATIMA NUR OĞUL - INTEGRATED ANALYSIS OF REPRODUCTION AND REGENERATION IN COLONIAL ASCIDIANS

GENCER YAPRAK - GLOBAL ECOLOGICAL NICHE MODELLING FOR THE BIMACULATED LARK (MELANOCORYPHA BIMACULATE) BREEDING HABITATS AND PREDICTION OF ITS DISTRIBUTION UNDER CURRENT AND FUTURE CLIMATE SCENARIOS

GÜLCE EDİŞ - DISCOVERY OF TWO NOVEL PARTITIVIRUSES INFECTING THE SAXICOLOUS LICHEN CALOGAYA DECIPIENS

İLAYDA DUMLUPINAR - EXPLAINING BRASSICACEAE SPECIES RICHNESS PATTERNS IN TÜRKİYE USING SPATIAL STATISTICAL MODELS

NIKOLA PETKOVIC - THE RESPONSE OF THE LIFE HISTORY TRAITS OF DAPHNIA MAGNA TO THE DETERIORATING TEMPERATURES

PELİN TAŞ - DIVERSITY DYNAMICS OF AIRBORNE PLANT COMMUNITIES REVEALED BY EDNAIR

SÖNGÜL SÖNMEZ - BIODIVERSITY HOTSPOTS AT RISK: PROJECTIONS OF CLIMATE CHANGE IMPACTS ACROSS ECOREGIONS

17:30 - 18:30

POSTER SESSION 1

18:30 - 21:00

BIODIVERSITY MUSEUM VISIT &
ICEBREAKER COCKTAIL

11TH ECOLOGY AND EVOLUTIONARY BIOLOGY SYMPOSIUM PROGRAM

10.07.2025
THURSDAY

- 09:45 - 10:45** JALIL NOROOZI - PLANT BIODIVERSITY AND BIOGEOGRAPHY OF THE HIGH MOUNTAINS OF THE IRANO-ANATOLIAN BIODIVERSITY HOTSPOT
- 10:45 - 11:15** COFFEE/TEA BREAK
- SESSION 5: ANCIENT DNA & PALEOBIOLOGY**
- 11:15 - 11:30** DİLEK KOPTEKİN - OUT-OF-ANATOLIA MIGRATIONS DURING THE NEOLITHIZATION OF WESTERN EURASIA
- 11:30 - 11:45** FERHAT KAYA - LATE QUATERNARY FOSSIL RODENT ASSEMBLAGES FROM THE MIDDLE AWASH STUDY AREA, AFAR RIFT, ETHIOPIA
- 11:45 - 12:00** FUNDA ÖZDEMİR DEĞİRMENÇİ - RECONSTRUCTING VEGETATION HISTORY OF THE MARMARA LAKE BASIN AND GEDİZ PLAIN USING SEDIMENTARY ANCIENT DNA (SEDADNA)
- 12:00 - 12:15** HANNAH MOOTS - EARLY 2ND MILLENNIUM CE PEOPLES OF CENTRAL ANATOLIA: AN ARCHAEOGENETIC VIEW FROM YOZGAT PROVINCE
- 12:15 - 12:30** GÖZDE ATAĞ - ANCIENT HUMAN DNA IN SEDIMENTS FROM OPEN-AIR HOLOCENE SITES ACROSS EUROPE
- 12:30 - 12:45** ÖZGE KAHYA PARILDAR - PRELIMINARY ASSESSMENT OF LATE MIOCENE HIPPARIONINE ASSEMBLAGE FROM THE SOFULAR LOCALITY (CENTRAL ANATOLIA, TÜRKİYE)
- 12:45 - 13:00** SEMA YILMAZ - A PRELIMINARY REPORT ON THE TAPHONOMY OF LATE QUATERNARY FOSSIL SMALL MAMMALS FROM THE AFAR REGION, ETHIOPIA
- 13:00 - 14:00** LUNCH
- SESSION 6: CONSERVATION BIOLOGY & BIOGEOGRAPHY**
- 14:00 - 14:15** ANIL SOYUMERT - DETECTING THE OFFSPRING OF MAMMALS: INDICATORS FOR THE KEY HABITAT PATCHES FOR WILDLIFE CONSERVATION
- 14:15 - 14:30** BATUHAN ATIF TUNÇ - EXPANDING CLIMATE NICHE FACTOR ANALYSIS BEYOND SPECIES: ECOREGION-LEVEL VULNERABILITY MAPPING UNDER CLIMATE CHANGE
- 14:30 - 14:45** BİRCAN TAŞKIRAN - ENHANCING GENETIC AND ALTRUISTIC TRANSFORMATION IN AMERICAN CHESTNUTS FOR FUNCTIONAL GENOMICS AND DISEASE RESISTANCE VIA AGROBACTERIUM-MEDIATED APPROACHES
- 14:45 - 15:00** ÇİÇDEM KANSU - GENETIC DIVERSITY AND PHYLOGEOGRAPHY OF WHITE OAKS (QUERCUS PETRAEA AND Q. PUBESCENS): INSIGHTS FROM THE EASTERN MEDITERRANEAN
- 15:00 - 15:15** İTRİ LEVENT ERKOL - ECOLOGICAL NICHE MODELING OF RARE TURKISH OLIVE CULTIVARS: A SPATIAL FRAMEWORK FOR AGROECOSYSTEM POLICY AND CONSERVATION
- 15:15 - 15:30** SADDAM SAQIB - EVOLUTIONARY HOTSPOTS AND ALIEN INVASIONS: INTEGRATING PHYLOGENETICS TO GUIDE CONSERVATION IN THE PAN-HIMALAYA
- 15:30 - 16:00** COFFEE/TEA BREAK
- 16:00 - 17:00** **PANEL:** ANTHROPOLOGY IN TÜRKİYE AT ITS CENTENNIAL: PAST, PRESENT, AND FUTURE (IN TURKISH) - FACILITATOR: EZGİ ALTINIŞIK, PANELISTS: FERHAT KAYA, MEHMET SOMEL
- 17:00 - 17:45** **POSTER SESSION 2**
- 17:45 - 18:45** **PANEL:** INTEGRATING BIODIVERSITY KNOWLEDGE INTO CONSERVATION PRACTICE (IN TURKISH) - FACILITATOR: NURBAHAR USTA, PANELISTS: C. CAN BİLGİN, UĞUR ZEYDANLI
- 18:45 - 19:00** SHORT BREAK
- 19:00 - 20:30** GENERAL ASSEMBLY OF EKOEVO (IN TURKISH)

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FRIDAY

09:30 - 10:30 **PARASKEVI KARACHLE - NON-INDIGENOUS SPECIES IN THE MEDITERRANEAN SEA: STATUS, IMPACTS AND PERSPECTIVES**

10:30 - 11:00 COFFEE/TEA BREAK

SESSION 7: MICROBIAL ECOLOGY & EVOLUTION

11:00 - 11:15 EZGİ ÖZKURT - STOCHASTIC DYNAMICS IN THE ASSEMBLY OF THE SEED-BORNE MICROBIOME IN BREAD WHEAT

11:15 - 11:30 İŞILAY ÇELİK - LINKING ENVIRONMENTAL PARAMETERS TO MICROBIAL FUNCTION VIA METAGENOMIC PROFILING

11:30 - 11:45 KEREM GÖKDAĞ - MICROPLASTICS ENRICH PATHOGENIC BACTERIA IN LAKES ACROSS A SALINITY GRADIENT

11:45 - 12:00 SİBEL ALTÜRK KARACA - INFLUENCE OF PHOSPHORUS CONCENTRATION ON GROWTH, PIGMENT ACCUMULATION, AND LIPID PRODUCTION IN FIVE MICROALGAL SPECIES

SESSION 8: ANIMAL BEHAVIOUR & WILDLIFE ECOLOGY

12:00 - 12:15 BEGÜN ERBABA - CORTICAL CELL DISTRIBUTION PATTERNS IN LANGUAGE-TRAINED GORILLAS: IMPLICATIONS FOR NEUROPLASTICITY

12:15 - 12:30 BELCE SU UYKUSUZ - THE EFFECTS OF AFFORESTATION ON THE FUNCTIONAL DIVERSITY OF STEPPE BUTTERFLY COMMUNITIES IN KONYA BASIN, TÜRKİYE

12:30 - 12:45 QAZI HAMMAD MUEEN - ASSESSING BREEDING PERFORMANCE OF A PRECOXIAL BIRD SPECIES USING GPS DATA

12:45 - 13:00 VİLDAN ACAR - ASSESSING COGNITIVE PERFORMANCE AND LEARNING EFFICIENCY IN WILD GREAT TITS: INSIGHTS FROM AN RFID-BASED MULTIPLE REVERSAL LEARNING EXPERIMENT

13:00 - 14:00 LUNCH

SESSION 9 - BIOINFORMATICS & PHYLOGENETICS & EVOLUTIONARY GENOMICS

14:00 - 14:15 ASLINUR AKTÜRK - GENOME ANNOTATION AND ANALYSES OF THE TENEBRIONID BEETLE CARCHARES MACER

14:15 - 14:30 CANSU ÇETİN - UNRAVELING HOST-PARASITE COEVOLUTION IN COMPLEX NATURAL SYSTEMS: INSIGHTS FROM MHC VARIATION IN AMPHIBIANS

14:30 - 14:45 EVA ŠATOVIĆ VUKŠIĆ - EXPLORING THE FUNCTION AND EVOLUTION OF THE "DARK MATTER OF THE GENOME" IN THE ECONOMICALLY SIGNIFICANT BEETLE TENEBRIO MOLITOR

14:45 - 15:00 İLGIN DENİZ CAN - INTEGRATIVE TAXONOMIC REVISION OF HELDREICHIA BUPLEURIFOLIA (BRASSICACEAE) BASED ON MORPHOLOGICAL AND GENOMIC DATA

15:00 - 15:15 PINAR AKBABA - FUNCTIONAL GENOMICS OF MUSCLE AND OVARY DEVELOPMENT IN TELEOSTS: INSIGHTS INTO EVOLUTION AND SPECIALIZATION

15:15 - 15:30 ZAHIDA SULTANOVA - LIFE-HISTORY TRAITS SHAPE THE EVOLUTION OF MAMMALIAN LIFESPAN

15:30 - 15:45 PRESENTATION ON EMBO SHORT-TERM TRAVEL GRANTS

15:45 - 16:15 COFFEE/TEA BREAK

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SESSION 10: COMMUNITY & ECOSYSTEM ECOLOGY

- 16:15 - 16:30** ANIL BAHAR - EFFECT OF CROWN FIRES ON TEMPERATE MIXED FORESTS OF NORTHEASTERN ANATOLIA: A MODELING APPROACH
- 16:30 - 16:45** GÜLSELİ KIRGIL - POLLINATOR ASSEMBLAGES AS DRIVERS OF PLANT RANGE: EVIDENCE FROM A MARL STEPPE IN CENTRAL ANATOLIA
- 16:45 - 17:00** ILGIN ERTAN GÜROL - AVIAN COMMUNITIES OF THE ANATOLIAN DIAGONAL: THE ROLE OF CLIMATE AND LAND COVER
- 17:00 - 17:15** İSMAİL BEKAR - CLIMATE OR LAND USE? DISENTANGLING DRIVERS OF WILDFIRES IN MEDITERRANEAN NORTH AFRICA
- 17:15 - 17:30** SELEN AKÇAKOCA - THE EFFECTS OF AFFORESTATION AGE ON THE FUNCTIONAL DIVERSITY OF PLANTS IN THE STEPPES OF CENTRAL ANATOLIA, TURKEY
- 17:30 - 17:45** ZEYNEP LADİN COŞGUN - CHANGE IN FUNCTIONAL TRAIT STRUCTURE OF PLANT COMMUNITIES ALONG AN ELEVATIONAL GRADIENT IN SOUTHWESTERN ANATOLIA
- 17:45 - 18:30** CLOSING CEREMONY

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POSTER PRESENTATIONS

- **ABDULLAH ENES GÖKSAL** - OCCURRENCE OF PROTOTHECA SPECIES IN AQUATIC ECOSYSTEMS OF TÜRKİYE
- **AHMET BERKAY DEMİRSEÇEN** - METAGENOMIC INVESTIGATION OF ANCIENT ORAL MICROBIOTA FROM DENTAL CALCULUS: A COMPUTATIONAL FRAMEWORK FOR TAXONOMIC AND FUNCTIONAL PROFILING
- **AHMET CAN TINAZ** - MOVEMENT ECOLOGY OF THE EGYPTIAN VULTURE (NEOPHRON PERCNOPTERUS) BREEDING IN BEYPAZARI: INSIGHTS FROM GSM TELEMETRY
- **AHMETCAN İMBATESEN** - FISH MORTALITIES AND MOLECULAR TRACES: A POST-EVENT EDNA SURVEY IN İZMİR BAY, AEGEAN SEA
- **ALİ KORAY KOÇ** - RIBOSOMAL CISTRON OF TETRIX BOLIVARI (TETRIGINAE, ORTHOPTERA): CHARACTERIZATION OF LINEAR AND SECONDARY STRUCTURE
- **ALİ ONUR SAYAR** - BALANCING ETHICS AND EFFICIENCY: EVALUATING CAPTURE TECHNIQUES FOR WILD GOATS IN RUGGED TERRAIN
- **ALİ SERHAN ÇAĞAN** - MICROPLASTIC POLLUTION AND RISK ASSESSMENT IN SURFACE WATER OF SUSURLUK SUB-BASIN
- **AYÇA YEŞİLBAĞ** - IMPACTS OF AQUACULTURE ACTIVITIES ON MICROBIAL DIVERSITY IN THE EUPHRATES RIVER: AN EDNA-BASED ASSESSMENT
- **AYDA YILMAZ** - ENDOSYMBIONT-ASSOCIATED DIVERGENCE: WOLBACHIA PREVALENCE AND MITOCHONDRIAL PATTERNS IN SAND FLIES OF TÜRKİYE
- **AYŞEGÜL ER GÖKÇE** - NON-INVASIVE MONITORING OF PREDATOR-PREY RELATIONSHIPS AND MICROBIAL DIVERSITY VIA OWL PELLET METABARCODING
- **BAŞAK ESGİN** - INVESTIGATION OF SELECTION PRESSURE ON COHESIN AND CONDENSIN GENES IN NANNOSPALAX XANTHODON
- **BERNA YAVUZ** - VARIABILITY IN SEED MASS, GERMINATION, AND DORMANCY IN STEPPE PLANT COMMUNITIES ALONG A PRODUCTIVITY GRADIENT IN CENTRAL ANATOLIA
- **BÜŞRA KARATAŞ** - GENOME MEETS GRAVE: MOLECULAR IDENTIFICATION OF TUBERCULOSIS IN A BYZANTINE BURIAL
- **CAN ELVERİCİ** - THE SHIFTING MOSAIC: CLIMATE CHANGE IMPACTS ON ENDEMIC VERTEBRATES IN THE MEDITERRANEAN BIODIVERSITY HOTSPOT
- **CEMREAY DEDE** - TAXONOMIC AND FUNCTIONAL DIVERSITY OF MACROINVERTEBRATE COMMUNITIES IN RELATION TO ENVIRONMENTAL VARIABLES IN RURAL PONDS OF ANKARA, TURKEY
- **DOĞAN SÖZBİLEN** - WE ALL LOVE SUCCESS STORIES, BUT WHY IS THE RETURN OF A POPULATION NOT RELIEVING? CONCERNS OVER THE RECOVERY OF THE MEDITERRANEAN SEA TURTLE POPULATION
- **EFE SEZGİN** - NOVEL PROTEIN LANGUAGE MODELS FOR VIRAL ESCAPE PREDICTION
- **ELÇİN EKŞİ** - COMPUTATIONAL METHODS TRANSFORMING PALEONTOLOGY
- **EMİNE BÜŞRA MÜLAYİM** - HOW POND CHARACTERISTICS AFFECT MACROPHYTE DIVERSITY AND COVERAGE IN RURAL PONDS OF ANKARA, TÜRKİE
- **EMRAH KIRDÖK** - ANCIENT SEDIMENTARY DNA REVEALS HUMAN, ANIMAL AND MICROBIAL ACTIVITY IN EL PORTALÓN CAVE
- **EYLEM GÜLAY** - PRELIMINARY ASSESSMENT OF MEIOFAUNAL DIVERSITY AND ENVIRONMENTAL FACTORS IN THE INTERTIDAL ZONE OF THE FİLYOS AND SEFERCİK COASTS (BLACK SEA, ZONGULDAK, TÜRKİYE)
- **FERİDE AVCI** - UNDERSTANDING THE FACTORS AFFECTING THE DIVERSITY OF ZOOPLANKTON COMMUNITIES IN A POND METACOMMUNITY
- **G. BİKE YAZICIOĞLU** - A MODELED BIOAVAILABLE STRONTIUM ISOSCAPE (87SR/86SR) OF TÜRKİYE: A RESEARCH TOOL FOR ARCHAEOLOGICAL MOBILITY RECONSTRUCTION
- **GÜLSELİ KIRGIL** - AFFORESTATION ALTERS EPIGEIC BEETLE COMMUNITY IN CENTRAL ANATOLIAN STEPPES
- **HABİB BAKIR** - THE EVOLVING MIND SUBTERRANEAN: MAPPING NEUROANATOMICAL ADAPTATIONS IN SUBTERRAN RODENTS
- **ILGIN DOĞA TEKİN** - ACORN THIEVES: UNCOVERING THE AGENTS BEHIND OAK REGENERATION
- **İŞILAY ÇELİK** - DECODING MICROPLASTIC-ASSOCIATED MICROBIAL COMMUNITIES: EDNA-BASED INSIGHTS INTO DIVERSITY AND ENVIRONMENTAL RISK
- **İLAYDA GÜVEN** - COMPARATIVE ANALYSIS OF $\delta^{13}C$ AND $\delta^{15}N$ RATIOS AND TROPHIC POSITIONS IN TWO OMNIVOROUS FISH SPECIES ALONG A DISTURBED URBAN RIVER GRADIENT
- **KAAN YILMAZ** - INTEGRATING CITIZEN SCIENCE AND NON-INVASIVE MOLECULAR TECHNIQUES TO REVEAL THE DIET OF PLANT-MIMICKING MANTISES (MANTODEA: EMPUSIDAE)
- **KANAT GÜRÜN** - KINSHIP ANALYSIS TOOLKIT: A NEW PIPELINE CONSISTING OF IN-HOUSE SCRIPTS TO DETERMINE THE RELATIONSHIP DEGREE AND THE TYPE OF FIRST DEGREE RELATIONS USING LOW-COVERAGE DATA
- **KAYRA CANPOLAT** - THE POPULATION GENETIC HISTORY OF THE HITTITE CAPITAL HATTUSA
- **KEMAL GÖRGÜLÜ** - PHYLOGENETIC RELATIONSHIPS AMONG WEEVIL SUBFAMILIES (COLEOPTERA: CURCULIONIDAE) BASED ON MITOCHONDRIAL COI SEQUENCES
- **KUTAY YÜKSEL** - PYRGOMORPHIDAE (ORTHOPTERA, CAELIFERA) MITOGENOME: CHARACTERIZATION AND PHYLOGENETIC POSITION

11TH ECOLOGY AND EVOLUTIONARY BIOLOGY SYMPOSIUM PROGRAM

POSTER PRESENTATIONS

- **MEHMET GÖKTUĞ ÖZTÜRK** - MODELING WILDFIRE OCCURRENCE IN TÜRKİYE: THE ROLE OF CLIMATE, PRODUCTIVITY, AND HUMAN INFLUENCE
- **MEHMET SOMEL** - ANCIENT HUMAN GENOMES FROM MEDIEVAL NICAIA (İZNİK)
- **METEHAN KARA** - STOCHASTIC DNA DAMAGE AND REPAIR DYNAMICS AS A DRIVER OF CELLULAR FITNESS UNDER RADIATION
- **MİNA CANSU KARAER** - DUAL APPROACH TO ASSESS GASTROINTESTINAL HELMINTH DIVERSITY IN CAPTIVE AND FREE-RANGING MOUNTAIN GAZELLES (*GAZELLA GAZELLA*) IN HATAY, TÜRKİYE
- **MUSTAFA SÖZEN** - TRACING THE RELATIONSHIP BETWEEN MORPHOLOGICAL AND CHROMOSOMAL EVOLUTION IN *NANNOSPALAX* SP. USING THREE-DIMENSIONAL GEOMETRIC MORPHOMETRICS
- **MUHAMMED ARİF DEMİR** - GEOMETRIC MORPHOMETRIC ANALYSIS OF MALE HIND WINGS AND GENITAL STRUCTURES IN MELOIDAE (COLEOPTERA): PATTERNS OF MORPHOLOGICAL DIFFERENTIATION AND THEIR PHYLOGENETIC IMPLICATIONS
- **MUHAMMED ARİF DEMİR** - ENVIRONMENTAL REQUIREMENTS OF MELOIDAE (COLEOPTERA) SPECIES: A CASE STUDY FROM INNER WESTERN ANATOLIA
- **NASTASSIA ULUDÜZ** - TYPES OF SKIN MARKINGS IN DELPHINIDAE OF THE ZONGULDAK REGION, SOUTHWESTERN BLACK SEA
- **NERGİS YAŞAV** - ECOLOGICAL CHARACTERISTICS AND LIFE TRAITS OF TWO HONEYBEE SUBSPECIES (*A. M. CAUCASICA* AND *A. M. SYRIACA*)
- **NİSA DALAR** - MAGNETORECEPTION IN BIRDS AND MAMMALS: A COMPARATIVE PERSPECTIVE FROM QUANTUM BIOLOGY
- **NUR FİLİZ** - EFFECTS OF WET AND DRY PERIODS ON LONG TERM PHOSPHORUS AND NITROGEN BUDGETS AND THEIR RELATIONSHIPS WITH LAKE NUTRIENT AND CHLOROPHYLL-A CONCENTRATIONS
- **NURSEMA AKTEPE** - COMPARATIVE ANALYSIS OF LEAF FLAMMABILITY TRAITS IN FOREST AND SHRUBLAND PLANTS OF WESTERN TÜRKİYE
- **ÖZGE ÇAKMAK** - MORPHOMETRIC INVESTIGATION OF *TRITICUM ARARATICUM* JAKUBZ, *TRITICUM BAEOTICUM* BOISS., *TRITICUM DICOCCOIDES* (KÖRN. EX ASCH. & GRAEBN.) SCHWEINF. AND *TRITICUM URARTU THUMANJAN* EX GANDILYAN SPECIES FOUND IN THE GENE POOL OF CULTIVATED WHEAT
- **ÖZGÜR TAŞKENT** - DIFFERENT BALANCING SELECTION MODES LEAVE HIGHLY SIMILAR TEMPORAL GENOMIC SIGNATURES
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- **YAÇMUR ACER** - UNCOVERING SUBTERRANEAN LIFE: A PILOT EDNA-BASED BIODIVERSITY STUDY ACROSS CONTRASTING CAVE HABITATS
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11TH ECOLOGY AND EVOLUTIONARY BIOLOGY SYMPOSIUM PROGRAM

POSTER PRESENTATIONS

- **YUQING LIU** - ANALYSING THE EFFECTS OF NUTRITION ON REPRODUCTIVE PERFORMANCE OF MALE FRUIT FLIES
- **YUQING LIU** - THE IMPACT OF LOCOMOTOR MODE AND PHYLOGENETIC CLADES ON SKELETAL MEASUREMENTS IN FROGS
- **YUQING LIU** - UNVEILING THE POPULATION GENETIC STRUCTURE OF EUROPEAN HORNBEAMS IN THE HAINAULT FOREST: DETERMINING THE EXTENT OF CLONALITY, GENETIC DIVERSITY AND SPATIALITY
- **ZEYNEP DİLBE UYAR** - INTEGRATING FLOWCAM IMAGING AND AI-ASSISTED CLASSIFICATION TO ASSESS PHYTOPLANKTON RESPONSES TO EXPERIMENTAL SALINIZATION
- **ZEYNEP OĞUZHAN** - GENOME SIZE: DID FLIGHT LOSS RELAX GENOME SIZE CONSTRAINTS IN BIRDS?

The role of soil microbiota in ecosystem health and sustainable tea cultivation: Insights from eDNA and metagenomic approaches

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Abstract ID: 104

Keywords: Ecosystem function, Metagenomics, Microbial diversity, Soil microbiota, Sustainable agriculture, Tea agroecosystem, eDNA

Soil microbiota are foundational to ecosystem functioning, driving nutrient cycling, organic matter decomposition, and plant-microbe interactions that support soil resilience and health. In tea agroecosystems, preserving microbial diversity is essential not only for sustainable crop production but also for maintaining long-term ecological balance. This study investigates the composition and functional potential of microbial communities in tea-cultivated soils using environmental DNA (eDNA) metabarcoding and metagenomic techniques.

These molecular tools allow for culture-independent profiling of microbial taxa and their ecological roles across diverse soil environments. Our results revealed that Firmicutes, Proteobacteria, Actinobacteriota, Acidobacteriota, and Chloroflexi were the dominant phyla in tea soils. Seasonal comparisons showed that winter soils had significantly higher relative abundances of Proteobacteria and Actinobacteriota compared to summer samples, indicating temporal shifts in community structure. These changes reflect microbial responses to environmental conditions and possibly management practices.

By focusing on native microbial assemblages, we demonstrate how local microbiota contribute to the stability, resistance, and recovery of soil systems under environmental stress. The data underscore the ecological value of integrating microbial diversity into land management strategies, particularly in regions where sustainable agriculture is critical. This work contributes to a broader understanding of how belowground biodiversity supports aboveground productivity and resilience in cultivated ecosystems.