Laboratory of Evolutionary Biology (LEB)

Conservation Genetics, Evolutionary Systematics, Evolutionary Genetics, Phenotypic variation

Our interests include systematics, phylogeny and speciation of various groups of species, landscape and conservation genetics of cryptic, endemic, rare, spatially fragmented and widespread taxa.

Research topics of LEB are:

1. To use integrative approach to resolve taxonomic uncertainties and to define species borders and evolutionarily significant units;
2. To apply integration of empirical genetic and ecological data in Landscape genetics approach and adaptive potential estimates in order to achieve a better comprehension of the relative importance of geographical barriers and recent evolutionary events versus contemporary factors in shaping intra-specific patterns of biological diversity;
3. To study population genetic structure and phenotypic variation of public health pest taxa. Our results provide insights into phenotypic plasticity, evolutionary potential and deeper understanding of vector dispersion pattern and therefore, they are essential for designing vector control strategies;
4. To employ the integrative approach in studies of phylogenetic relationships and genetic distinctiveness of species groups as well for evaluating the phylogenetic signal of different markers.

COLLABORATIONS

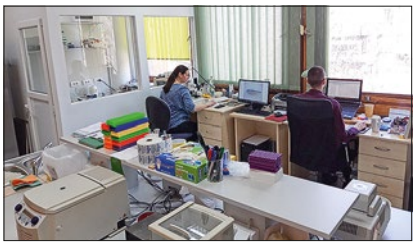
- Virological Reasearch Group, Szentágothai Research Centre, University of Pécs, Hungary;
- Groningen Institute for Evolutionary Life Sciences, Faculty of Science and Engineering, University of Groningen, The Netherlands;
- Finnish Museum of Natural History, University of Helsinki, Finland.

SELECTED PROJECTS

Title: *Dynamics of gene pool, genetic and phenotypic variability of populations, determined by the environmental changes (#OI173012)*
Type: scientific
Duration: 2011- present
Contact person: Dr Vesna Milankov

SELECTED EQUIPMENT

- Mastercycler personal, Ependorf;
- Centrifuge 5415 R, w/o rotor refrigerated, Ependorf;
- Thermomixer compact, Ependorf;
- Apparatuses for acrylamide and agarose gel electrophoresis: Sub-Cell agarose gel electrophoresis systems, Bio-Rad; Hoefer SE 600 Standard dual cooled gel electrophoresis units, Pharmacia Biotech; Electrophoresis power supply EPS 3500, Pharmacia Biotech;
- Stereomicroscope Leica MZ 12.5 with 320DFC Camera.



CONTACT PERSON

Dr Vesna Milankov, Full Professor; vesna.milankov@dbe.uns.ac.rs; +38121 485 2671
http://www.dbe.uns.ac.rs/o_departmanu/laboratorije/laboratorija_za_evolucionu_biologiju_(leb)