

Environmental DNA (eDNA) training workshop (virtual)

14.12. – 16.12.2021

Host: University of Duisburg-Essen

Lecturers: Prof. Dr. Florian Leese, Dr. Arne Beermann, Dr. Martina Weiss, Dr. Cristina Hartmann-Fatu, MSc. Robin Schütz, MSc. Till-Hendrik Macher

Access link: <https://uni-due.zoom.us/meeting/register/u5Ysce6ppjotE9aWiuonKAojoeos3vzhrBoK>

AGENDA

Tuesday 14.12.2021 (Leese, Schütz, all)

10:30 – 12:30

- Welcome note
- From sampling to data (overview)
- Types and definitions of environmental DNA
- Design of eDNA metabarcoding amplicons
- Q&A

13:30 – 17:00

- Detailed lab workflow (extraction to read-to-lead library) including many video examples from lab
- Q&A



Wednesday 15.12.2021 (Leese, Macher, all)

10:30 – 12:30

- Illumina sequencing details; common strategies, problems
- Quality control, structure of header etc.

13:30 – 17:00

- eDNA metabarcoding data analysis using TaxonTableTools (TTT, Macher et al. 2021)
 - Participants should install the software on Tuesday, information will be provided on Tuesday during the introduction
- Q&A

Thursday 16.12.2021 (Leese, Weiss, Beermann, Macher, Hartmann-Fatu, Schütz)

10:30 – 12:30

- Open Space Workshop
- Discussion of challenges, design of Master Programme

- End of the meeting -

Annex 4. Summary of the Participant Feedback Form for Training (to be filled by host institution)

Part 1: Training Information

Date 14.12. – 16.12. 2021.

Place: On-line training workshop. Host University of Duisburg-Essen

Lecturer: Prof. Dr. Florian Leese, Dr. Martina Weiss, Dr. Cristina Hartmann-Fatu, MSc. Robin Schütz, MSc. Til-Hendrik Macher

Training objective: The aim of this course is to provide knowledge of general theoretical introduction into DNA extraction, PCR, sequencing and ecological analysis.

Day 1 focussed on types and definitions of environmental DNA, design of eDNA metabarcoding amplicons, extracting eDNA from aquatic ecosystems and detailed lab workflow including many video examples from lab.

Day 2 focussed on the Illumina sequencing details; common strategies, Quality control and eDNA metabarcoding data analysis using TaxonTableTools.

Day 3 started with Open Space Workshop, discussion of challenges and design of Master Programme.

Evaluator name Adisa Ahmić

Signature _____

Evaluator affiliation Faculty of Natural Science and Mathematics, University of Tuzla

Part 2: Organization and Structure

Organizational feature	3 Strongly Agree	2 Agree	1 Disagree	0 Strongly Disagree
The objectives of the training were clearly defined	3X4			
Information related to each item prepared well in advance of the training	3X4			
The material distributed were helpful and on time	3X4			
The presentations met my expectation	3X4			
Participation and interactions were encouraged by moderator	3X4			
The training objectives were met	3X4			
I will be able to apply the training's content in my future work	3X4			
The training content was challenging enough	3X4			
The timeframe was adequate	3X4			
The facilities were adequate	3X4			
Skill practice sessions were included	3X4			
Suggestion and criticism box (please specify)				
				Total:132

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, the Commission cannot be held responsible for any use which may be made of the information contained therein.

Annex 10. EVENT REPORT

Title of document	Event report of the Training in Environmental DNA (eDNA)
Work Package	WP 2 Development
Last version date	(18/12/2022)
Status	Draft xFinal
Document version	v.01
File name	Event report of the training in Environmental DNA (eDNA)
Number of pages	5
Dissemination Level	Internal

VERSIONING AND CONTRIBUTION HISTORY

Version	Date	Revision Description	Partner Responsible
v.01	18/12/2022	First draft	P8 University of Tuzla

LIST OF ABBREVIATIONS

XXXXXXXXXX

Purpose, objectives and elements of event

The purpose of this course was general theoretical introduction to DNA extraction, PCR, sequencing and ecological analysis. The basic elements of events were focused on introduction and definition of environmental DNA, design of eDNA metabarcoding amplicons, extracting eDNA from aquatic ecosystems, lab workflow, the Illumina sequencing details, eDNA metabarcoding data analysis using TaxonTableTools and design of Master Programme.

LIST OF PARTICIPANTS

Prof.dr. Edina Hajdarević, University of Tuzla, Faculty of Natural Sciences and Mathematics

Prof.dr. Jasmina Kamberović, University of Tuzla, Faculty of Natural Sciences and Mathematics

Prof.dr. Elvira Hadžiahmetović-Jurida, University of Tuzla, Faculty of Natural Sciences and Mathematics

Prof.dr. Adisa Ahmić, University of Tuzla, Faculty of Natural Sciences and Mathematics

Date of the 1st day

14.12.2021.

Date of the 2nd day

15.12.2021.

Date of the 3rd day

15.12.2021.

CONCLUSIONS

The training was successful, extremely helpful and provided a lot of information about modern molecular technology of the Environmental DNA (eDNA). The lecturers were really well prepared.

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, the Commission cannot be held responsible for any use which may be made of the information contained there



Programme

AQUATIC ECOSYSTEM RESEARCH UDE

Tuesday 14.12.2021 (Leese, Schütz, all)

10:30 – 12:30

- Welcome note
- From sampling to data (overview)
- Types and definitions of environmental DNA
- Design of eDNA
- Q&A

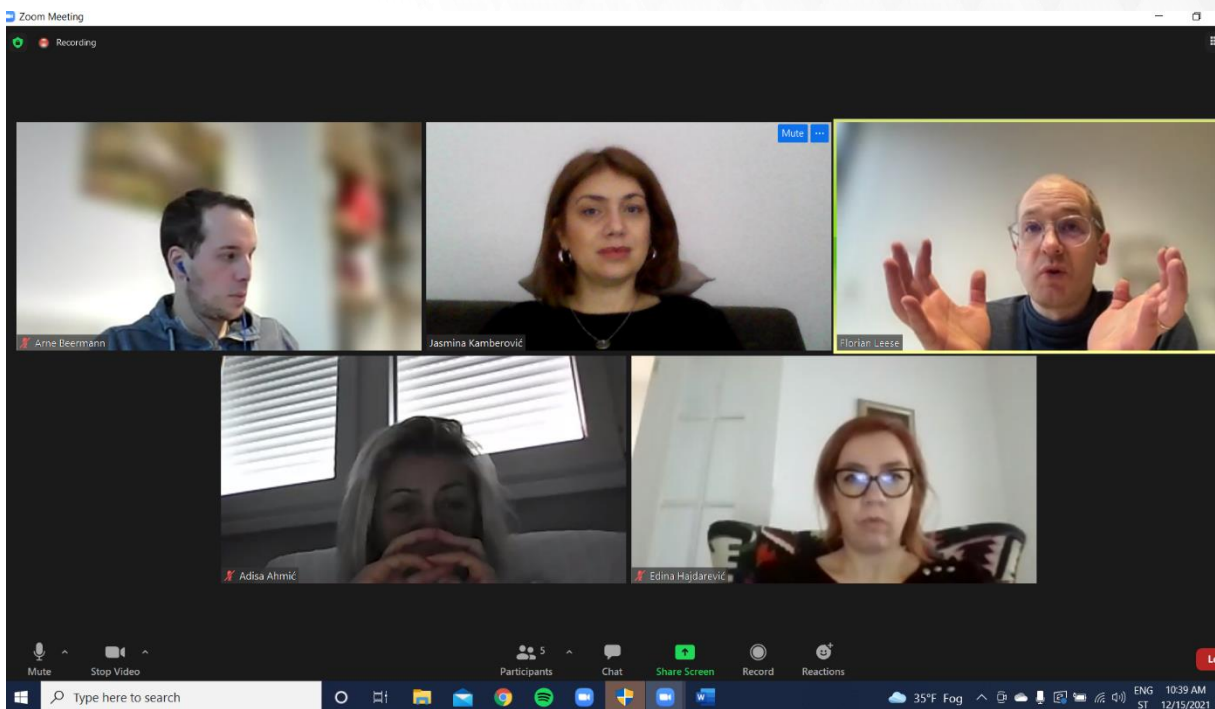
Wednesday 15.12.2021 (Leese, Macher, all)

10:30 – 12:30

- Illumina sequencing details; common strategies, problems
- Quality control, structure of header etc.

13:30 – 17:00

- eDNA metabarcoding data analysis using TaxonTableTools (TTT, Macher et al. 2021)
 - Participants should install the software on Tuesday, information will be provided on Tuesday during the introduction
- Q&A



Zoom Meeting

Recording

Arne Beermann, Jasmina Kamberović, Florian Leese, Adisa Ahmić, Edina Hajdarević

Mute, Stop Video, Participants, Chat, Share Screen, Record, Reactions

Type here to search

35°F Fog, 10:39 AM, ENG ST, 12/15/2021

