



BIOTOXMET PROJECT

final words

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Ruđer Bošković Institute

KICK-OFF MEETING

Integrated evaluation of aquatic organism responses to metal exposure:
gene expression, bioavailability, toxicity and biomarker responses
(BIOTOXMET)

Zagreb, 11th October 2021



Work plan – 1st year

1st Project Period

Results to be achieved	Team member
D1.1 Kick off meeting (Zagreb, RBI, summary record of the meeting prepared), project web page	All project members
D1.2 Report on field sampling of water prepared for determination of: a) physico-chemical water parameters and metal concentrations (locations I-VII, four times a year, sampling in triplicates at each location, 84 samples in total); b) $^{87}\text{Sr}/^{86}\text{Sr}$ isotope ratio (locations I-VII, once a year, sampling in triplicates at each location, 21 samples in total); c) water toxicity (locations I, II, VI, industrial and municipal wastewaters, twice a year, sampling in triplicates at each location, 30 samples in total)	D. Valić T. Kralj T. Mijošek V. Filipović Marijić S. Šariri
D1.3 Report on field sampling of sediments prepared for determination of: a) carbonate content (locations I-VII, once a year, 7 samples in total); b) grain size distribution (locations I-VII, once a year, 7 samples in total); c) metal concentrations (locations I-VII, once a year, 7 samples in total)	D. Valić T. Kralj T. Mijošek V. Filipović Marijić S. Šariri



Work plan – 1st year

D1.4 Report on field sampling of indicator organisms:

- a) fish brown trout (locations I, II and III, twice a year, 35 fish individuals at each location, 210 individuals in total);
- b) acanthocephalan species *Dentitruncus truttae* (locations I, II and III, twice a year, all individuals)
(for molecular analyses 6-8 specimens of fish and acanthocephalans will be used, locations I and II, once a year, 12-16 individuals in total)

D. Valić
T. Kralj
T. Mijošek
Z. Redžović
I. Karamatić
V. Filipović
Marijić
S. Šariri

D1.5 Laboratory analyses conducted and reports on the analyzed results of water samples prepared:

- a) physico-chemical water parameters
- b) concentrations of total and dissolved metals
- c) ⁸⁷Sr/⁸⁶Sr isotope ratio
- d) water toxicity based on laboratory tests using algae and *Daphnia*

D. Valić
T. Kralj
Z. Dragun
Z. Kljaković
Gašpić
Ž. Cvetković
D. Bandoniene

D1.6 . Laboratory analyses conducted and reports on the analyzed results of sediments samples prepared:

- a) carbonate content
- b) grain size distribution
- c) metal concentrations

Z. Kljaković
Gašpić
Service – RBI
Ž. Fiket



Work plan – 1st year

D1.7 RNA of appropriate concentration and quality isolated from acanthocephalans for transcriptome profiling

I. Vardić Smrzlić
S. Šariri

D1.8 De novo sequencing of transcriptome of acanthocephalans and estimation of differences in gene expression in acanthocephalans from the reference and pollution impacted site conducted

Commercial
service
(Macrogen,
Genewiz, etc.)

D1.9 Annual project meeting held (Zagreb, RBI)

Most of the team
members (project
members
involved in
conducted
activities)



THANK YOU FOR
YOUR ATTENTION

