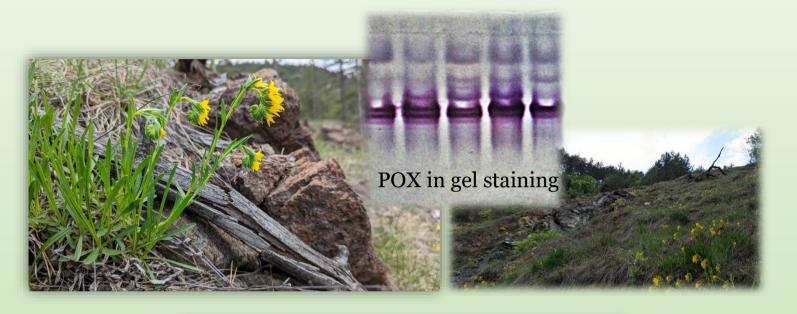


TRAINING SCHOOL



Transition metals and antioxidative metabolism in serpentinophytes



Date of event: 29-31 March 2023

Deadline for registration: March 15, 2023

Venue: Faculty of Natural Sciences and Mathematics, University of Banja Luka

Email for registration: biljana.kukavica@pmf.unibl.org



Training school open for all members of COST action 19116 and students at the I, II and III study cycle of Faculty of Natural Sciences and Mathematics, University of Banja Luka

*The participants will receive a certificate after the completion of the course.

https://pmf.unibl.org/ https://plantmetals.eu/



COST Action 19116 Trace metal metabolism in plants PLANTMETALS

Training school: **Transition metals and antioxidative metabolism in serpentinophytes**

Location: Faculty of Natural Sciences and Mathematics, University of Banja Luka, Mladena Stojanovića 2, 78000 Banja Luka, Republic of Srpska, B&H (https://pmf.unibl.org/kontakt/)

Date of event: 29th-31st March 2023

Agenda:

Day I (29th March 2023)

10:00-10:15 h

Opening

10:15-11:00 h

Prof.dr Miloš Mojović, Faculty of Physical Chemistry, University of Belgrade

"EPR-Spectroscopy: Principles and applications for exposing oxidative stress in biosystems."

11:00-11:30 h

Prof. dr Siniša Škondrić Faculty of Natural Sciences and Mathematics, University of Banja Luka "Diversity of serpentinophytes of Bosnia and Herzegovina"

11:30-12:00 h

Coffee break

12:00-12:45h

Dr Filis Morina, Czech Academy of Sciences, Biology Centre, Institute of Plant Molecular Biology, Department of Plant Biophysics & Biochemistry

"Metal (hyper)accumulation in plant defense response"

12:45-13:15 h

Prof. dr Dijana Mihajlović, Faculty of Agriculture, University of Banja Luka

"Transition metals in soil-origin, chemical species, bioavailability and methods of chemical analysis"

13:15-13:35 h

MSc Ivana Pucar, Faculty of Natural Sciences and Mathematics, University of Banja Luka "Morphological and biochemical variability of an obligate serpentinophyte *Halacsya sendtneri* (Boiss.) Dörfl. (Boraginaceae)"

13:35-14:10 h

Dr Đura Nakarada, Faculty of Physical Chemistry, University of Belgrade

Assessing the antioxidative activity of water insoluble compounds towards biologically relevant free radicals

Day II (30th March 2023)

9:00-10:00 h

Group 1: Quantification of transition metals in the plants and accompanying soils using atomic absorption spectrophotometry -1^{st} part /Sampling, sample preparation for analyses and extraction of metals by acid digestion

10:15-11:30 h

Group 1: Laboratory work: Plant identification methods

9:00-11:30 h

Group 2: Laboratory work: Sample preparation for protein electrophoresis

11:30-12:30 h Coffee break 12:30-13:30 h

Group2: Quantification of transition metals in the plants and accompanying soils by method of atomic absorption spectrophotometry -1^{st} part /Sampling, sample preparation for analyses and extraction of metals by acid digestion

13:45-15:00 h

Group2: Laboratory work: Plant identification methods

12:30-15:00 h

Group 1: Laboratory work: Sample preparation for protein electrophoresis

Day III (31st March 2023)

9:00-10:00 h

Group 1: Quantification of transition metals in the plants and accompanying soils using atomic absorption spectrophotometry -2^{nd} part/Measurement of the metal contents in the extracts obtained after acid digestion

10:15-11:30h

Group 1: Laboratory work: Identification of serpentinophytes

9:00-10:30

Group 2: Laboratory work: Electrophoresis: in gel activity determination of antioxidant enzymes

11:30-12:30

Coffee break

12-30 -13: 30 h

Group2: Quantification of transition metals in the plants and accompanying soils using atomic absorption spectrophotometry -2^{nd} part/ Measurement of the metal contents in the extracts obtained after acid digestion

13-45-15:00 h

Group 2: Laboratory work: Identification of serpentinophytes

12:30-15:00h

Group 2: Laboratory work: Electrophoresis: in gel activity determination of antioxidant enzymes

The participants will receive a certificate after the completion of the course.

Support:

The Ministry of Scientific and Technological Development, Higher Education and Information Society of the Republic of Srpska