

ForBio, NIBIO, and UiB course: Taxonomy and DNA barcoding of soil organisms: nematodes (Nematoda), mites (Acari) and springtails (Collembola)

3 – 9 July, 2022 11:30 AM, NIBIO Svanhovd Research Station, Finnmark, Norway

**Teachers:** Cornelya Klütsch, NIBIO, [cornelya.klutsch@nibio.no](mailto:cornelya.klutsch@nibio.no) , Anna Seniczak, University Museum Bergen, [anna.seniczak@uib.no](mailto:anna.seniczak@uib.no) , Arne Fjellberg, [arnecoll@gmail.com](mailto:arnecoll@gmail.com) , Oleksandr Holovachov, Swedish Museum of Natural History, [oleksandr.holovachov@nrm.se](mailto:oleksandr.holovachov@nrm.se) , Galina Gusarova, TMU, [galina.gusarova@uit.no](mailto:galina.gusarova@uit.no).

**Assignment and credits:** The course is equivalent to 3 ECTS. A written exam will follow the course and will consist of an online exam. ForBio will provide certificates with ECTS for those who successfully pass the exam, or confirmation of participation to those who choose not to take the exam.

### **Tentative schedule:**

*Sunday, July 3 and Saturday, July 9 - arrival and departure days.*

#### **Monday, July 4, 2022:**

9:00: Introduction of course instructors, general information on NIBIO Svanhovd and the course, (Cornelya Klütsch and Snorre Hagen, NIBIO Svanhovd and Galina Gusarova, ForBio)

10:00: Introductory round for course participants

10:30 – 11:00: Coffee break

11:00 – 12:30: General introduction to soil organisms (Anna Seniczak)

12:30: Lunch

13:30: Field trip to collect soil samples and introduction to field methods (All)

18:00: Dinner

19:00: Introduction to Berlese funnels and Baermann traps – filling samples into extractors (All)

#### **Tuesday, July 5, 2022: “Springtail day” led by Arne Fjellberg**

9:00: *The lecture title to be announced*

10:30: Coffee break

11:00: *The lecture title to be announced*

12:30: Lunch

13:30: In-depth work in focus groups.

15:00: Coffee break

15:30: In-depth work in focus groups.

18:00: Dinner

**Wednesday, July 6, 2022:**

9:00: Nematode diversity and role in ecosystem functioning (Oleksandr Holovachov)

10:30: Coffee break

11:00: Identification of soil nematodes and their use as bioindicators (Oleksandr Holovachov)

12:30: Lunch

13:30: In-depth work in focus groups.

15:00: Coffee break

15:30: In-depth work in focus groups.

18:00: Dinner

**Thursday, July 7, 2022:**

9:00: Soil mites: diversity and ecology (Anna Seniczak).

10:30: Coffee break

11:00: Introduction to identification of mites (Anna Seniczak).

12:30: Lunch

13:30: In-depth work in focus groups.

15:00: Coffee break

15:30: In-depth work in focus groups.

18:00: Dinner

**Friday, July 8, 2022: Molecular identification methods and DNA-barcoding**

9:00: Introduction to DNA-barcoding (Cornelya Klütsch)

10:30: Coffee break

11:00: Introduction to DNA-barcoding, continued (Cornelya Klütsch)

12:00: Lunch

13:00: Introduction to DNA-barcoding, continued (Cornelya Klütsch)

15:00: Coffee break

15:30: Round table discussion on morphological and molecular methods for species identification (All)

16:00: Course ends