

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*, Anna Seniczak, University Museum Bergen, *anna.seniczak@uib.no*, Arne Fjellberg, *arnecoll@gmail.com*, Oleksandr Holovachov, Swedish Museum of Natural History, *oleksandr.holovachov@nrm.se*, Galina Gusarova, TMU, *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: General information on NIBIO Svanhovd and the course (Cornelya Klütsch, NIBIO Svanhovd and Galina Gusarova, ForBio)

9:15: Introductory round of course participants and instructors

9:45: Identification of soil nematodes (Oleksandr Holovachov)

10:30: Coffee break

11:00: General introduction to soil organisms (Anna Seniczak, University Museum Bergen)

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:**

 9:00: Introduction to identification of springtails (Arne Fjellberg)

10:30: Coffee break

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

12:30: Lunch

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

15:00: Coffee break

15:30: In-depth microscopic 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: Nematodes as bioindicators (Oleksandr Holovachov)

11:45: In-depth microscopic work in focus groups.

12:30: Lunch

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

15:00: Coffee break

15:30: In-depth microscopic 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: Springtail diversity and role in ecosystem functioning (Arne Fjellberg)

12:30: Lunch

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

15:00: Coffee break

15:30: In-depth microscopic 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, NIBIO Svanhovd)

10:30: Coffee break

11:00: Introduction to DNA-barcoding: Molecular Methods (Cornelya Klütsch, NIBIO Svanhovd)

12:30: Lunch

13:30: Introduction to DNA-barcoding: Molecular Methods and species identification (Cornelya Klütsch, NIBIO Svanhovd)

15:00: Coffee break

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

16:00: Course ends