

## **Advanced Bee Taxonomy Trainings – SPRING project**

SPRING is an international research project that aims to set up a European Pollinator Monitoring Scheme. To make this scheme possible, SPRING (Strengthening Pollinator Recovery through INDicators and monitorinG) intends to strengthen taxonomic capacity in EU Member States with regard to pollinating insects. For this purpose, the University of Mons is searching candidates for an advanced course on bee taxonomy.

### **Framework**

Bees, hoverflies and butterflies are the most important pollinators in Europe. Pollinators are indispensable as more than 70 percent of our crops need insects for optimal pollination. Moreover, more than 80 percent of wild plant species benefit from animal pollinators for fruit and seed production, making pollination a key service for ecosystem and biodiversity maintenance. However, pollinators are under serious pressure due to multiple anthropogenic drivers. For a successful protection plan, an international measurement program is indispensable, because our current knowledge is insufficient. In order to understand the population trends of pollinators at the continental level, an extensive monitoring program across large temporal and spatial scales is needed.

The goal of the SPRING project is to set the base for the long-term monitoring of pollinator populations and diversity in European countries (the European Pollinator Monitoring Scheme, EU-PoMS). In the framework of this monitoring network, large numbers of specimens will be collected every year across the European territory, and they will need to be identified to assess species-specific trends.

### **Aim**

The sampling of the multiple field sites will generate large amounts of samples that will need to be processed and identified. However, bees are often difficult to identify to species level. The training of a new generation of taxonomists is therefore crucial to meet the requirements of the project.

The goal of the course will be to train people with previous experience in bee identification to learn further identification skills and learn how to use taxonomic keys and other material available for identification to species level. The purpose is to provide the necessary tools and training for identification at species level for species-rich groups. For the most difficult taxa, final validation will be done by a senior taxonomist.

### **Profile of participants**

We are searching for people who will be involved in the identification of the specimens collected in the SPRING pollinator monitoring scheme of their region or country, or who want to be involved. For the continuation of the project, it is important that applicants have an interest to continue working on insect identification in the future. Preferably they have a stable position at their institute, or can provide a statement from their superior that they have an outlook towards such a position. We

prefer candidates that are working for institutions that are already partner in the SPRING project, or that have a prospect for future participation.

We are looking for students who are familiar with bee taxonomy and identification. Students should be familiar with the use of dichotomous keys and/or multi-entry keys to genera, be able to identify bees to 'easy' genera; know ca. 25 most common/easy bees of their area, and have experience with mounting specimens.

### Program

The courses are given by experienced taxonomists.

The following genera will be covered: *Bombus*, *Andrena*, *Lasioglossum*, *Halictus*, *Nomada*, *Hylaeus*. We will provide a detailed program before the start of the training.

At the end of the course, you will have all the available material for identification to species level on European bees, you will know the relevant characters that you will need to identify individuals at the species level for species-rich genera and you will know the network of taxonomists at the European scale.

Participants are encouraged to bring their own samples that were collected in the SPRING monitoring scheme during the previous field season.

### Logistics

The trainings are organised by the University of Mons (Denis Michez and Sara Reverte). The participants will come to Mons (Belgium) for a week of training on location, plus 3 days of online training. One online day will be organised before the week in Mons and two days after.

Four sessions are planned, the dates are:

- 8 to 12 August 2022,
- 5 to 9 September 2022,
- 9 to 13 January 2023,
- 23 to 27 January 2023.

The four sessions will show differences on the weight given to the different bee genera. One session will focus on the fauna of Nordic countries, with more weight given to *Bombus*. The other three sessions will focus on central-southern countries with more weight on other genera that are complex and difficult to identify. All sessions will be tailored to the identification of species present in those regions as much as possible.

Each session will consist of 10 participants. Students will be invited to participate in one of the sessions only. Please fill in the form which dates you are available to come. We will search for the best match between session dates and the availability of students from the different regions.

The following expenses are covered by the project: travel to and from Mons, accommodation during the course, and meals during the course.

## Registration

The registration is in two steps. You should fill the following form:

[https://docs.google.com/forms/d/1fC2LrPUWfWm6wLjGm\\_QFWTU2iaXjMTWYS6kihvJcRdk](https://docs.google.com/forms/d/1fC2LrPUWfWm6wLjGm_QFWTU2iaXjMTWYS6kihvJcRdk)

AND you should send a motivation letter of up to 400 words explaining your background and why you want to participate in the courses to: [sara.revertesaiz@umons.ac.be](mailto:sara.revertesaiz@umons.ac.be)

**Deadline for applications: 15 May 2022**

## Contact

Do you have any questions? Please let us know by email.

Contact: Sara Reverte, [sara.revertesaiz@umons.ac.be](mailto:sara.revertesaiz@umons.ac.be)

We look forward to seeing you at the course!

SPRING project: <https://www.ufz.de/spring-pollination/index.php?en=49075>

Laboratory of Zoology, University of Mons: <https://web.umons.ac.be/zool/en/home/>