**The European BEE course – 2018 edition**

**Framework?**

Cost project Super-B: <http://superb-project.eu/>

SUPER-B is a [COST Action](http://www.cost.eu/COST_Actions/fa/FA1307) that will bring together scientific and societal communities involved in the conservation and sustainable management of ecosystem services mediated by pollinators. >70 of our crops need insects for optimal pollination; these include many fruits, nuts, oil crops, fibers and vegetables with some producing no yield without insect pollination. The direct economic value of crop pollination by insects in the EU is >14 billion euro annually. Moreover, >80 of wild plant species benefit from animal pollinators for fruit and seed production, making pollination a key service for ecosystem and biodiversity maintenance.

SUPER-B will combine scientific evidence (existing and new knowledge) and social feedback for developing conservation strategies for pollinators. Specifically, the Action will (1) identify the role of insect pollination in agriculture and other ecosystems; (2) clarify best practices for mitigation of pollination loss, and (3) compare and contrast important drivers of pollinator loss (wild and managed species). SUPER-B will contribute towards maintaining natural ecosystems and achieving sustainable use of pollinators in agricultural production. Its results are relevant to all European countries and will be disseminated to a wide community of beneficiaries (scientists, farmers, beekeepers, industry, policy-makers, NGOs and the public).

**Aim?**

We aim (i) to provide a global overview on the Systematics and the Ecology of European bees including the up-to-date methods; (ii) to train to recognize the morphology of the main European genera by using keys; (iii) to collect wild bees in the field with standard technics (net, pan trap, aspirator); (iv) to prepare a collection of pinned specimens.

THE BEE COURSE is designed primarily for botanists, conservation biologists, pollination ecologists, and other biologists whose research, training, or teaching responsibilities require a greater understanding of bee taxonomy, diversity and conservation. It emphasizes the classification and identification of more than seventy bee genera of Europe, and the general information provided is applicable to the global bee fauna. Lectures include background information on the biology of bees, their floral relationships, their importance in maintaining and/or improving floral diversity, inventory strategies, and the significance of oligolecty (i.e., taxonomic floral specialization). Field trips acquaint participants with collecting and sampling techniques; associated lab work provides instruction on specimen identification, preparation and labeling.

**Where?**

Malta, Close to Valetta, at the university MCAST (<http://www.mcast.edu.mt/>)

Have a look on our last experience in Cyprus on our facebook page: <https://www.facebook.com/EuropeanBeeCourse/>

**Budget?**

Super-B budget covers the invitation of the trainers and material. Applicants have to pay for their flights, accommodation and meals (~250 euros). However Super-B budget will pay back a part of this cost depending on the budget available. Based on previous edition, we can say that Super-B cover all the cost of the trainers.

**When?**

Arrival, evening 4thof March 2017; departure evening 9th of March

**Who?**

Co-organised by the University of Mons (Denis Michez) and MCAST (Mario Balzan).

4 supervisors: Denis Michez (UMons, Belgium), Nicolas Vereecken (ULB, Belgium), Stuart Roberts (BWARS, UK) and Achik Dorchin (Hebrew University of Jerusalem, Israel)

15 students, Ph-D and postdoc will have priority but undergraduate student can apply

**Program?**

This is a provisional program. We will provide detailed program to each participant before the Bee Course.

4th of March from 6pm

Arrival, regular buses or taxi (20 euros) from the airport of Valetta to the hotel

5th of March

9h00: Welcome and presentation of the organization and the goal. Denis Michez

9h30: Presentation of the trainees. 10mins presentation each student (+ questions).

12h00: Lunch

13h00 – 13h30: Systematics and diversity of European bees. Denis Michez

13h30 – 14h00: How to recognize a bee? Lecture + study of pinned specimens. All trainers

14h00 – 16h00: How to recognize bee genera? Short tongued bees. Lecture + study of pinned specimens. All trainers

16h00 – 16h15: Break

16h15 – 18h15: How to recognize bee genera? Long tongued bees. Lectures + study of pinned specimens. All trainers

18h15-19h00: Bees of Malta. Mario Balzan

19h00: Dinner

6th of March

09h00 – 10h00: How to collect, sample and prepare specimens of bees? Achik Dorchin, Stuart Roberts & Nicolas Vereecken.

10h15: Departure for field trip.

12h00: Lunch in the field.

15h00-18h45: Back to the lab. Preparation of the collected specimens and determination

19h00: Dinner

7th of March

09h00 – 11h00: Ecology and Economic importance of bees. Nicolas Vereecken & Achik Dorchin.

11h00: departure for field trip.

12h00: Lunch in the field.

16h00-18h45: Back to the lab. Preparation of the collected specimens and determination

19h00: Dinner

8th of March

9h00: Determination of the collected material

12h00: Lunch

13h00: Structure of bee community. Nicolas Vereecken

14h00: Red List: from country to continent. Denis Michez

15h00: Phylogeny and diversity and Eucerine bees. Achik Dorchin

9th of March

Departure time related to fight time

**Edition 2016**





