

Project Update: December 2023

Summary of activities carried out this semester

After we have finished the field data collection, we have been examining about 160 hours of video recordings to obtain the information required for the analyses: 1) total number of marked bees that returned to the hive for each release distance; 2) return time (in minutes) of marked bees to the hive for each release distance; and 3) total number of bees entering and exiting the hive during the experiments. These data will be correlated to the landscape features surrounding the meliponaries/study areas in the project's next step.

Honey analyses were carried out in Center for Nuclear Energy in Agriculture (CENA) from University of São Paulo. Sample treatment was performed by microwave assisted sample decomposition using (Microwave ETHOS 1600). Elementary chemical determinations were performed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP OES). The amounts of B, Al, Na, Mg, P, S, K, Ca, Mn, Fe, Cu, Zn, Mo, As, Cd and Pb will be detected. At this moment, we are waiting for the analysis results.

Other activities

Preliminary results of the project regarding the pollen collection were presented in two scientific events held in October 2023:

- XIII Encontro Sobre Abelhas. Pollen preference of mandaçaia bees in the city of São Paulo (12 to 14th October 2023);
- IUFRO 2023 America Latina. Proporção de plantas exóticas e nativas na composição de espécies florísticas na dieta da mandaçaia em um ambiente urbano. (17 to 19 October 2023).

Plan of activities for the next periods

In the next months we are going to be fully working on the video recording analyses. Also, aiming to improve my technical and academic knowledge, I have been applying to an internship with Dr Lars Chittka from the Research Centre for Psychology at Queen Mary, University of London, to be taken with his research group next year.

Year	2024												2025											
Semester	1°						2°						1°						2°					
Month	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Bibliographic survey																								
Video recording analyses																								
* Internship abroad																								
Mapping and spatial analysis																								
Data analysis																								

