CBGP Centre de Biologie pour la Gestion des Populations

Vendredi 29 mars 2024, 14:00

Grande salle + visio

PHYSIOLOGICAL ADAPTATION TO ENVIRONMENTAL STRESS IN INSECTS

par

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- Environmental temperatures have risen steadily over the last century and extreme weather events have become more frequent. Organisms, especially ectotherms, face extreme thermal conditions that reduce their fitness and their populations need to adapt through genetic changes and/or phenotypic plasticity to persist over time.

- Our group is interested in studying the evolution and phenotypic plasticity of physiological traits in *Drosophila* species. In this talk I will show some studies from the last 10 years that have been carried out in our laboratory in which we have explored the local adaptation of thermal tolerance, the evolutionary response of thermal tolerance to artificial selection, the role of the microbiota in plasticity of thermal tolerance, and the genotype by environment and genotype by sex interaction of thermal tolerance in *D. subobscura* and *D. melanogaster*.

- More recently, we have been studying the genetic variability and phenotypic plasticity of *D. suzukii*, a globally distributed pest insect, as a biological model to understand rapid adaptation during invasion processes.

- Exposé en anglais.

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