09 10 FEB 2023

ANNUAL SCIENTIFIC DAYS

OUR SPECIAL SPEAKERS

KIRSTY MACLEOD

EMANUEL FRONHOFER

TED TURLINGS

JS2023

SORBONNE UNIVERSITY
INTERNATIONAL
CONFERENCE CENTER
(CICSU)

PARIS

INSTITUTE OF ECOLOGY AND ENVIRONMENTAL SCIENCES OF PARIS
IEES PARIS

GUESTS

KIRSTY MACLEOD

Lecturer at Bangor University
MACLEOD LAB
United Kingdom

"I am a behavioural and evolutionary ecologist with broad interests in maternal investment, reproductive systems, stress physiology, and sociality. I'm fascinated by how individuals interact with one another and their environment, how those interactions affect physiology and behaviour, and how this contributes to evolution and shapes vertebrate communities. My work is both field and laboratory-based, integrating aspects of behavioural and evolutionary ecology with comparative physiology to test key hypotheses and to elucidate the mechanistic basis of processes observed in the field. My research has given me experience of a range of taxa including birds and mammals, but I now primarily work on reptiles."

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https://kjmacleod.weebly.com

EMANUEL FRONHOFER

Researcher CNRS
Institute of Evolutionary Science of Montpellier (ISEM)
Experimental evolution of communities team

"I am generally interested in the evolution of life-history strategies of organisms living in metacommunities. The major focus of my work lies on the causes and consequences of dispersal. I study the effects of ecological and evolutionary processes as well as eco-evolutionary feedbacks at multiple hierarchical levels, from shifts in allele frequencies to range dynamics. My work combines theoretical approaches and experimental evolution."

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https://www.emanuelfronhofer.net/

TED TURLINGS

Professor
Fundamental and applied research in chemical ecology
Faculty of Science
University of Neuchâtel, Switzerland

"We mainly study the chemical ecology of plant-insect interactions. By unraveling how plants defend themselves against insect attacks and how specialized insects have evolved to circumvent these defenses, we hope to provide ideas for novel, sustainable strategies for the control of agricultural pests."

ted.turlings@unine.ch

https://www.unine.ch/farce/home/membres/ted-turlings.html

9:30:00 AM

Pr Turlings Ted

Fundamental and applied research in chemical ecology lab

Institute of Biology, University of Neuchâtel, Switzerland

Herbivore-induced plant volatiles and how they can be exploited for crop protection?

Turlings Ted <ted.turlings@unine.ch> (1)

1 - University of Neuchâtel (Suisse)

When attacked by insect herbivores, plants release so-called herbivore-induced plant volatiles. Aboveground, these volatile signals serve as foraging cues for predators and parasitoids, whereas belowground they are exploited by insect-killing nematodes. I will present results on our efforts to utilize and manipulate these and other plant-produced compounds to enhance the efficacy of biological agents against two key pests of maize plants, the western corn rootworm and the fall armyworm.

10:15:00 AM

Rivas Johanna, PhD student AgroParisTech

CReA - ECOSENS

Plasticisers mix impacts on the post-embryonic development of the moth *Spodoptera littoralis (Noctuidae)*

Rivas Johanna <johanna.rivas@sorbonne-universite.fr> (1), Grisel Morgane <morgane.grisel@sorbonne-universite.fr> (1), Maria Annick <annick.maria@sorbonne-universite.fr> (1), Fuentes Annabelle <anabelle.fuentes@sorbonne-universite.fr> (1), Renault David <david.renault@univ-rennes1.fr> (2), Siaussat David <david.siaussat@sorbonne-universite.fr> (1)

1 - Institut d'écologie et des sciences de l'environnement de Paris (France), 2 - Ecosystèmes, biodiversité, évolution [Rennes] (France)

Plastic manufacturing has greatly developed over the years. The main plasticisers BPA and DEHP have become environmental pollutants often co-occurring in contaminated soil and water. As they can act as Endocrine Disrupting Chemicals, it is crucial to study potential effects on wildlife, such as terrestrial invertebrates. A realistic approach was proposed where growing plants were watered with DEHP, BPA and the mixture of both compounds and leaves were fed to Spodoptera littoralis larvae. This talk focus on post-embryonic development disruption from larvae to adult reproduction.