Institute of Ecology and Environmental Sciences of Paris (IEES-Paris)

UMR 7618 - UPEC/Sorbonne University/Paris Diderot University/IRD/CNRS/INRA

Key words
Ecological engineering • Biodiversity • Urban environment • Macrofauna • Plants • Microorganisms

The IEES-Paris is composed of five departments totalling 14 teams. Three of them, based at the University of Paris-Est Créteil, work on the main thematic domains namely biodiversity, functional and evolutionary ecology, and the impacts of global changes.

Objectives and research topics

Through concepts and methodologies in ecology, ecophysiology, evolution sciences, water and soil sciences, the IEES-Paris researches on ecological and environmental systems analysis and modelling.

Research in the laboratory is cross-disciplinary focused more particularly on interactions between fauna, plants and microorganisms.

Social species in their environment: adaptation and evolution (ESAE)

- Community interactions through the study of symbiotic microorganisms/ eusocial insects interactions
- Response of eusocial species (ants, termites…) to global changes
- Development of biocontrol agents to regulate agricultural pest insect population
- Response of soil macrofauna to change of plant diversity
- Interactions between soil ecosystem engineers, telluric microflora (earthworms' and termites' intestinal symbiosis) and the rhizosphere

Molecular characterization and ecophysiology of plants (Ecophys)

- Plant tolerance mechanisms and physiological markers development
- Strategy development in bioremediation and biomonitoring
- Rhizosphere interactions

Biogeography and diversity in soil interactions (BIODIS)

- Impact of interaction on soil ecological functions
- Biogeography of organisms and their interactions
- Evolution of interactions

Technological platforms

- Molecular biology
- Analysis (mass spectrometer, HPLC...)
- Production (insect breeding room, phytotron)
- Microbiology

IEES-Paris
Faculty of science and technology - University of Paris-Est Créteil Val de Marne
61, avenue du Général de Gaulle F-94010 Créteil cedex
☛ ***More information: www.biologie.ens.fr/bioemco***