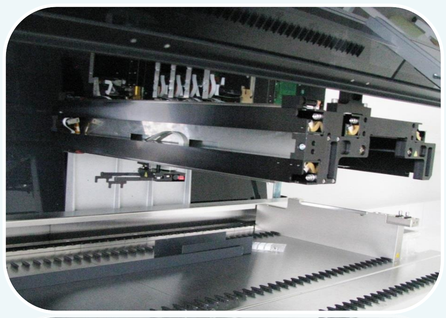
Biochem-Env, une plateforme leader en biochimie environnementale

Christian Mougin, Nathalie Cheviron, Virginie Grondin, Anne Jaulin, Jean Pierre Petraud, Francoise Poiroux, Amelie Trouve

http://www.ecosys.inra.fr



Biochem-Env, the environmental biochemistry for Research

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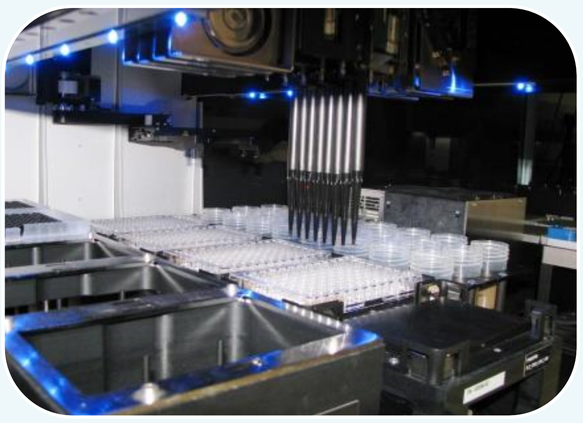
Context

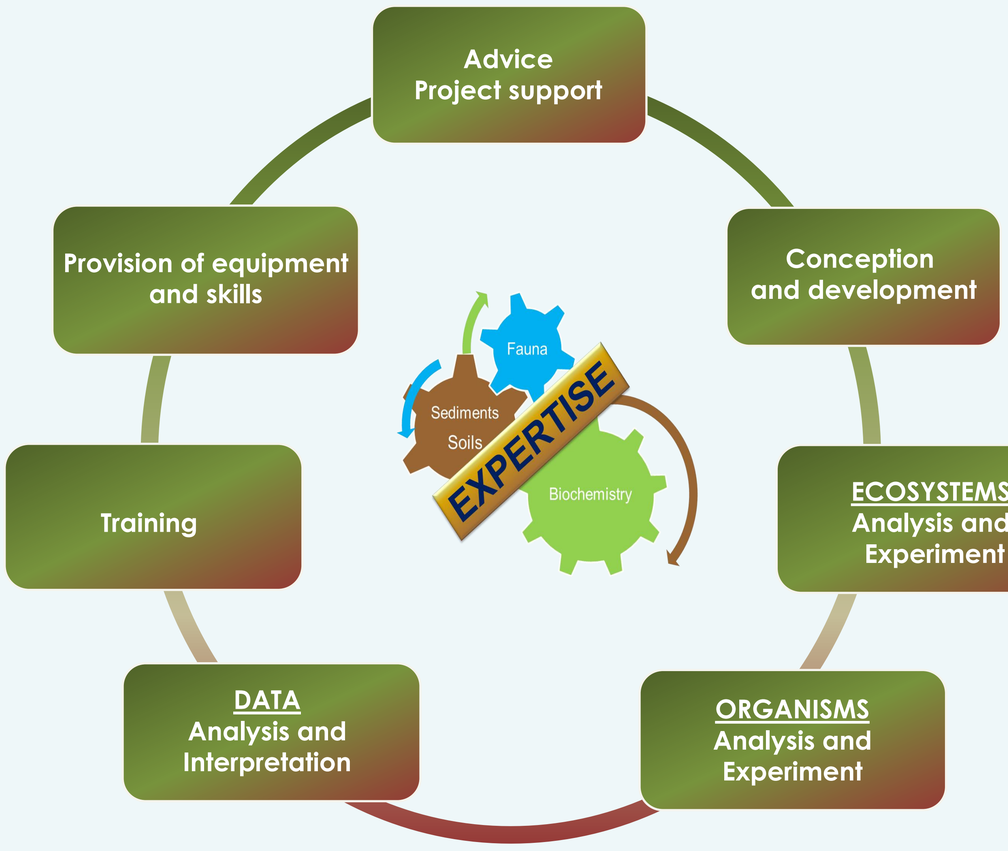
Biochem-Env is a scientific and technical platform of the infrastructure ANAEE-France dedicated to the analysis and experimentation on continental ecosystems, terrestrial and aquatic.

Biochem-Env represents a strategic service for analyzing ecosystems (soil, sediment, macrofauna…) in the field of environmental biochemistry, for agro-environmental research.

Innovation for environmental biochemistry

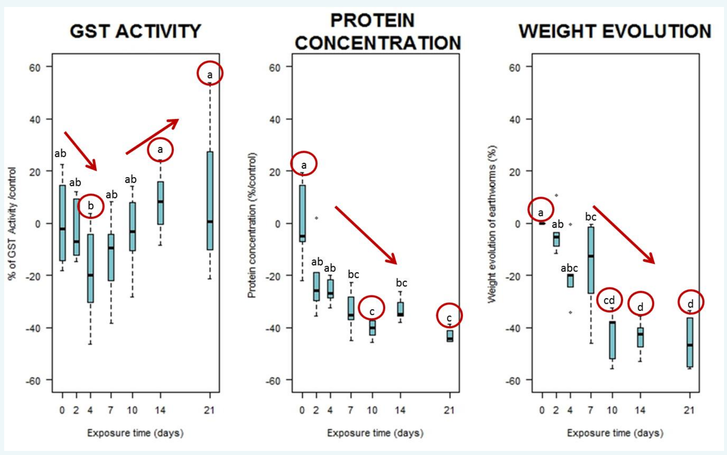


- Use of robotics to increase the flow of analyses, measurement accuracy and repeatability
- Development and use of standardized methods
- Development of a mobile lab
- Quality management system
- Open Science



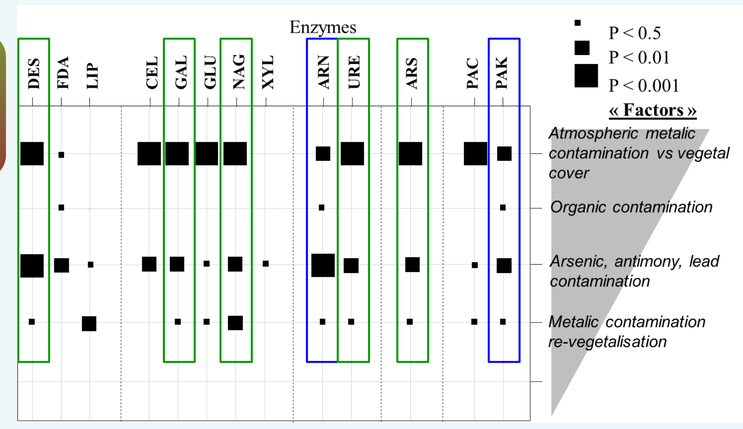
Responses of earthworms exposed to the insecticide Cypermethryn at 10 agronomic doses

> Significant effects of the time of exposure



Impacts of chemical contamination on soil enzymatic activities

> Metals are more active than organics



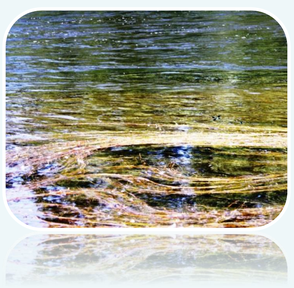
Biochemical indicators measured

In soils and sediments

- Enzymes involved in biogeochemical cycles and the metabolism of macromolecules
- Indicators of metabolic activity

In invertebrates

- Energetic reserves and macromolecules
- Enzymes of the oxidative stress
- Enzymes of detoxification



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