

ENCONTRO SCIENTIA

April 03

12h00

Room 2.2.15, Ciências ULisboa

Coevolutionary dynamics in plant-herbivore interactions

Coevolved systems, like plant-herbivore interactions, provide compelling evidence for coevolutionary arms races as major drivers of diversification. A central challenge in studying coevolutionary dynamics in plant-herbivore interactions is that most extant systems have reached an evolutionarily stable state, where herbivores have evolved detoxification mechanisms to cope with the 'not-so-novel' chemical defences of their host plants. As such, many plant-herbivore systems only allow for retrospective analyses of co-evolutionary processes that occurred millions of years ago, which are typically assessed through comparative macroevolutionary approaches. In contrast, laboratory studies using specific systems to observe the evolution of counter-adaptations in real time provide an exciting alternative.

In this Encontro Scientia session, I will provide a brief overview of two experimental evolution studies aimed to improve our understanding of how antagonistic coevolutionary dynamics between plants and herbivores may affect the tempo and mode of evolutionary change.



**Erik
van Bergen**

**Adaptation
to Complex
Environments,
CE3C,
Ciências ULisboa**

