



BIOL3364 Principes et méthodes de la lutte biologique intégrée

[15h+22.5h exercises] 3 credits

Teacher(s): Claude Bragard, Thierry Hance
Language: French
Level: Third cycle

Aims

Biological warfare is becoming very popular to protect cultures. Meanwhile, its startup requires a technique often more important and a deep knowledge of phytosanitary problems (insects and diseases) and the possibility to use natural agents in the warfare (predators, parasites, competitors, entomopathogens, etc.). Additionally, industrial applications like auxiliary production, their diffusion and the quality control correspond to new potential uses. The objectives of the course are to explain the basic techniques necessary to use the methods of biological warfare and to present the actual possibilities and the products that correspond.

Also, an analysis of ins and outs of this type of intervention will be practiced. The problems and limitations will be discussed and the future perspective described.

Main themes

After a historic illustrated by the most important examples, the analysis of mechanisms and populations growths and their fluctuation will be done. The plant-insect, prey-predator and host-parasite systems will be studied and their modelisation exposed to use them in biological warfare. This course will be accompanied of article discussions and exterior visits.

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Prerequisites: basics in ecology and biogeography (second cycle level)

Evaluation: oral examination and evaluation of personnel work.

Support: syllabus, law texts, articles, web.

Other credits in programs

ENVI3DS/2	Diplôme d'études spécialisées en science et gestion de l'environnement (Agriculture et environnement)	(3 credits)	Mandatory
SC3DA/B	Diplôme d'études approfondies en sciences (Biologie)	(3 credits)	