

## Faculty of Biological, Agronomic and Environmental Engineering

### BRPP2104 Malherbology

[15h+7.5h exercises] 2 credits

This course is taught in the 2nd semester

**Teacher(s):** Jean-François Ledent, Alain PEETERS  
**Language:** French  
**Level:** Second cycle

#### Aims

Understanding the dynamics of weeds development in different types of plant productions, natural environments and infrastructures. Capability of analysing the types and density of weeds and forecasting the risks of damages in the short and in the long term. Knowledge of strategies of weeds control and capacity to develop strategies of control taking into account regulations.

#### Main themes

Biological characters of weeds that influence their development and degree of nuisance for crops and grasslands (way of dispersal, survival and rhythm of germination of seeds, lifespan and types of development#). Effects of climatic conditions and soil cultivation on germination of weeds relatively to crops and grasslands. Influence of crop and grasslands management on weeds development. Mechanisms of nuisance of weeds, direct and indirect detrimental effects on crop and grassland growth and development, yield and quality, effects on biodiversity and interference with cropping techniques. Identification of weeds at the seedling stage, prediction and quantification of damages caused to crops in the short and in the long run. Possibilities and limitations of the various strategies of prevention: cropping techniques, weeds control (mechanical, physical, biological and chemical destruction). Main groups of herbicides, mechanisms of selectivity and fate in the environment, regulations for use (these aspects complement topics in phytopharmacy). Case analysis of weed development and control.

#### Other credits in programs

<b>BIR22/9A</b>	Deuxième année du programme conduisant au grade de bio-ingénieur : Sciences agronomiques (Protection intégrée des plantes)	(2 credits)	Mandatory
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