

E-SPACE

E-SPACE - Improving epidemiosurveillance of Mediterranean and tropical plant diseases

ABSTRACT

Keywords : Agroecology, Plant, Bio-aggressor, Plant disease, Biological control, Biological invasion, Model, Phylogeography, Population dynamic, Simulation

Year : 2015

Project number : 1504-004

Type of funding : PE

Project type : PC

Research units in the network : AIDA BIOAGRESSEURS-PHIM ECO&SOLS GECO IPME-PHIM ITAP PVBMT

Start date : 2015-10-01

End date : 2019-09-30

Flagship project : no

Project leader : Claire Neema

Project leader's institution : InstitutAgro

Project leader's RU : BGPI-PHIM

Budget allocated : 900000 €

Total budget allocated (including co-financing) : 900000 €

Funding : Labex

GOAL

The objectives of the project are to create synergies between existing epidemiological surveillance structures and to define innovative approaches to improve our knowledge of the pathological and epidemiological processes underlying the emergence of plant pathogens. Our objective is to provide epidemiological surveillance programmes with data and tools to improve their response to the emergence of plant pathogens.

ACTION

Planned actions

- 1- understand the pathways of pathogen bio-invasion
- 2- understand the epidemiological dynamics and adaptive changes underlying the emergence of plant diseases
- 3- understand the biotic factors associated with the non-emergence or emergence of pathogens.

RESULTS

Expected results :

- Strengthened functional links between epidemiological surveillance stakeholders
- Two trial sites dedicated to rice epidemiosurveillance
- Diagnostic tools for epidemiosurveillance

PERSPECTIVES

Overall coherence with related national or international initiatives

The project should create synergy with existing national and international initiatives, e.g. the Plant Disease Phytobiome initiative supported by the American Phytopathological Society, the plant health monitoring platform currently under development at Anses, French networks (French Plant Health Network, FNX Xanthomonas, effectome) and regional initiatives in southern countries such as LMI Pathobios (Burkina Faso), LMI Rice (Vietnam), CRPs, ePRPV (south-western countries of the Indian Ocean)

Project management and coordination

The project will be coordinated by Professor Claire Neema with the help of researchers from UMR BGPI, IPME and PVBMT