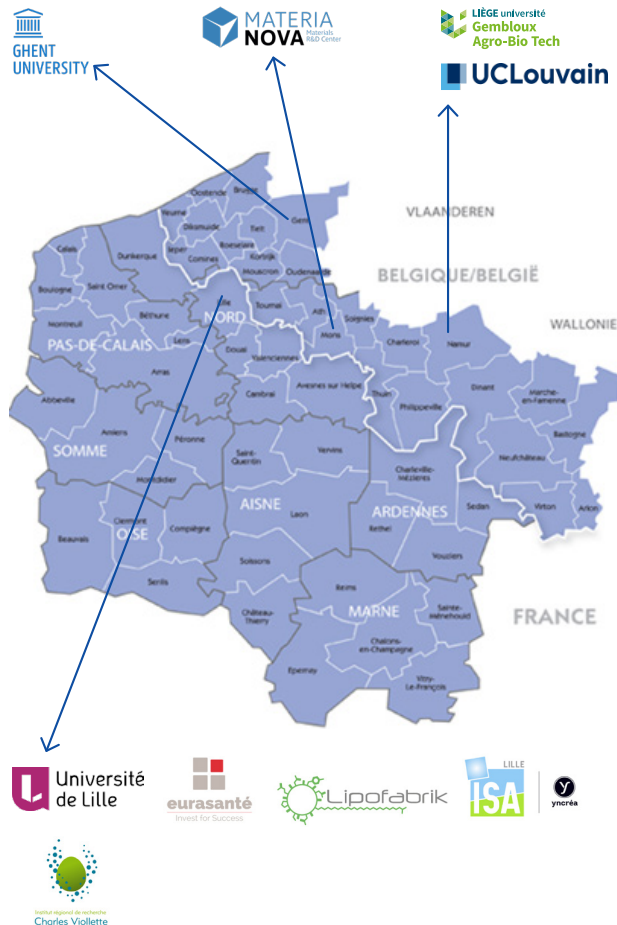


PARTNERS



SCIENTIFIC COORDINATOR

François Krier
Associate Lecturer
francois.krier@univ-lille.fr



eurasanté
Invest for Success

COMMUNICATION

Pierre-Louis Robillard
Agri-Food Advisor
plrobillard@clubster-nsi.com



SMARTBIOCONTROL
BioProd

BIOPROD

**New strategies for the
production and formulation
of low-toxicity biopesticides**
www.smartbiocontrol.eu

THE PROJECT

1,8
Million €
of which

1
Million € financed
by the ERDF

4
years
2016-2020

With the support of the European Regional Development Fund

Funded by:



THE CONTEXT

The use of synthetic plant protection products, or even chemicals in agriculture, leads to a degradation of water and air quality, and therefore impacts biodiversity and human health.

However, it appears that their replacement by bio-based products offering the same protective performance, while preserving the environment and health, remains limited.

This observation applies to the lipopeptides developed in the BIOPROD project. Derived from *Bacillus subtilis*, they are very promising, but a few points remain to be developed in order to allow their use, such as:

- The improvement of their formulation to increase their **effectiveness in the field**;
- **Scaling up their production** to an industrial level;
- The finalization of **toxicity and degradability tests**;
- The necessary **modification of agricultural practices**;
- The support and **training of farmers and distributors**.



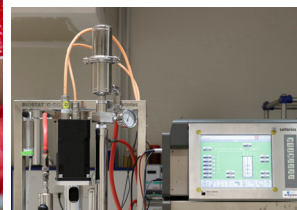
OBJECTIVES

Develop new strategies for the production and formulation of low-toxicity biopesticides.

Remove the main obstacles to the development of new biopesticides that are more environmentally friendly and accessible at a reasonable cost.

EXPECTED RESULTS

- Efficient and competitive formulated products
- Identifying and taking into account the expectations of distributors of phytosanitary products and agro-food industry
- Support and awareness-raising for prescribers and farmers



THE STRATEGY

Optimization of the production (yield, cost, scale-up) of lipopeptides from bacteria of the genus *Bacillus*

Study of the biodegradability and cytotoxicity of these lipopeptides

Molecular formulation and efficacy testing

Market analysis and surveys of professionals to estimate their expectations regarding the development of new biocontrol products