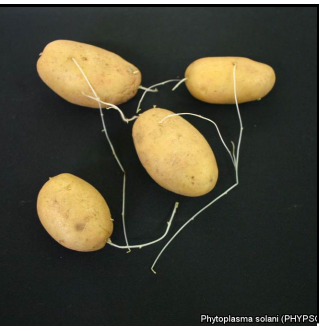
Euphresco

Success story

March 2019

To understand the biology and epidemiology of potato phytoplasmas

Phytoplasmas are specialised plant pathogenic bacteria, colonizing the plant phloem tissue. They lack a cell wall, are non-culturable and are transmitted by insect vectors and by vegetatively propagated plant material. These plant pathogens are increasingly spreading and causing economical losses.



The goal of the PHYLIB II project is to support the work of national plant protection organizations (NPPOs) by increasing knowledge on phytoplasma's infecting potato in order to support pest risk assessment and to develop and validate rapid and reliable detection and identification tests.

Project partners are monitoring *Phytoplasma* spp. across Europe. The work includes: monitoring psyllid populations and screening for phytosplasmas; understanding vector behaviour and diversity; identifying potential reservoirs and novel vectors. The knowledge produced will increase our understanding of the risk of outbreak in different regions.

In Canada, experiments with potato showing purple top symptoms associated with *Phytoplasma* infection are carried out to compare gene expression in infected and uninfected plants.

Project ID: The biology and epidemiology of '*Candidatus* Liberibacter solanacearum' and potato phytoplasmas and their contribution to risk management in potato and other crops (PHYLIB II).