

# Molecular characterization of potato wart disease (SendoTrack)



#### Funding

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#### Research consortium

NVWA (NL), BFSA (BG), CFIA (CA), AU (DK), JKI (DE), BPI (GR), DAFM (IE), VNIIKR (RU), SBA (SE), SASA (GB), AAFC (CA), BSU (GE), LU (DE), APQA (KR), WUR (NL), CIP (PE), NAAS (UA)

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#### Goals

Potato wart disease is caused by the quarantine soil-borne fungus Synchytrium endobioticum. As the pathogen develops new pathotypes which overcome varietal resistance, a thorough molecular characterization of the pathogen from European outbreak sites is essential. The project aims to collect data on the pest's genomic diversity, geographical origin and epidemiological traits, in order to track-andtrace the fungus and help support surveillance and management practices

## **Objectives**

The project objectives are:

- To collect samples from all participating countries (warts, compost, soil, etc.);
- To molecularly characterize the samples (mitochondrial DNA and nuclear small simple repeats-SSR);
- To validate a diagnostic test using the whole genome amplified DNA material

### Key outputs and results

The main project's results are:

- Validated protocols for the detection and identification of S. endobioticum isolates;
- A public data platform in which the genomic diversity of S. endobioticum isolates can be accessed in the context of geographic distribution and other relevant metadata