



inov3PT
SEED POTATO
FOR THE FUTURE

MonYvector

Monitoring of Potato Virus Y vectors



Abstract

Virus Y is the virus that most frequently affects potato crops. It has a complex epidemiology; it is transmitted on the one hand by aphids (60 species which may or may not be infested with the crop) and on the other by leafhoppers belonging to the typhlocibinae family. The use of certified seed potatoes and mineral oil-based treatments during vegetation are currently the most effective solutions for limiting transmission of the virus. These treatments are triggered as a function of vector pressure, estimated on the basis of chromatic cell (insect trap) readings. The aim of this project is to improve the monitoring of PVY vectors using innovative, connected sensors. Real-time definition of the flight dynamics of vectors (aphids and leafhoppers) could make it possible to better manage treatments according to their pressure and guarantee of certified seed potatoes.

Actions

- installing the sensors
- validating sensor performance
- sensor configuration (aphid and leafhopper recognition under controlled conditions)
- integrated sensors into a seed potato production scheme
- integration of data into Vigiculture (ACTA collaboration)

TECHNICAL MEMO

Project leader:



Project duration: 36 months

Start/End of project:

01/01/2022 – 31/12/2024

Partners:

- The 3 regional growers organisations Bretagne Plants, Comité Centre et Sud, Comité Nord (experimental services and analysis laboratories)
- Université Picardie Jules Verne (UPIJV)
- FaunaPhotonics (Denemark)
- ACTA

Financial support:



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