



P R O J E C T S

Canopy Potato

Project information

Coordinator: FN3PT

Duration: 42 months (01/10/2020 to 31/03/2024)

Total Budget from the French Ministry of Agriculture and Food – CASDAR: € 299.959,00



Develop, deploy and validate a system of wireless transmission fixed sensor networks, in order to monitor the development of potato plant in real-time

Description of the action

- **Action N°1:** Implementation and deployment of the network of fixed sensors on the experimental sites and validation of the real measurements
- **Action N°2:** Experimental, multi-year, and multi-site validation of dynamic monitoring of plant canopy
- **Action N°3:** Development of an information system for collecting, storing, and viewing data from the sensor network
- **Action N°4:** Optimization of the frequency of oil application based on real-time canopy monitoring
- **Action N°5:** General coordination, communication

PESSL will support actions 1, 3, and 5.

The expected results are:

- Obtain a unique system integrating the various chosen sensors (ultrasound, reflectance) allowing the monitoring of plant growth in real-time
- Development of a validated phenotyping method, usable as a decision support tool to better position oil sprays
- Design of new technical recommendations
- Acquisition of more precise knowledge on the differential in plant development according to the variety, the year of cultivation, and its geographical origin
- Help users to better understand digital tools
- Obtaining a scalable database

Partners

- [FN3PT \(France\)](#)
- [INRAE \(France\)](#)
- [Comite Nord \(France\)](#)
- [Comite Centre & Sud \(France\)](#)
- [bretagne plants \(France\)](#)
- [PESSL \(Austria\)](#)