



inov3PT
SEED POTATO
FOR THE FUTURE

IPMY

Integrated Pest Management Against PVY



Abstract

Viral diseases were the cause of almost 60% of the downgrades recorded in the 2019/2020 seed potato production season, with Potato virus Y (PVY) accounting for 87%. Climate change and the withdrawal of crop protection molecules are favouring the proliferation of aphids, the vectors of PVY. To date, the use of mineral oils is the only preventive treatment available to limit the spread of virus Y, but with the pressure of vectors increasing at an increasingly early stage, its effectiveness is not always optimal. For this reason, it is imperative to determine the application methods that maximise the effectiveness of mineral oil and to develop other alternative and complementary practices to oil. The project involves determining the persistence of mineral oil on treated plants and the factors that influence its maintenance, as well as finding combinations of levers to complement its effectiveness. The aim is to test biocontrol products that act directly or indirectly on the plant or vector, as well as cultivation methods such as companion plants and mulching, as part of an integrated pest management and agro-ecological approach.

Actions

- measure the persistence of mineral oil using analytical tools (GC/MS)
- define the conditions that protect oil from transmission of the Y virus
- test the effect of biocontrol products, under controlled conditions, on viral transmission
- testing combinations of levers in the field

TECHNICAL MEMO

Project submitted to Ecophyto ++
2021 : TransmYcontrol

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, Bretagne Plants
- Université Picardie Jules Verne (UPJV)
- Seed companies (companion plants)
- Biocontrol manufacturers
- Collectors

Financial support:



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