



inov3PT
SEED POTATO
FOR THE FUTURE

PHYLEA

Identification of biomarkers of the physiological age of potato tubers



Abstract

During the potato storage phase (consumption, processing, planting), the tubers go through several physiological stages ranging from dormancy to sprouting. The duration of these stages depends on the physiological age of the tubers. Controlling sprouting, which is all the more crucial for the plant, is becoming increasingly complex with hotter and drier climatic conditions and the withdrawal of synthetic sprout inhibitors. Lack of emergence, lack of sprouting, the appearance of thread-like sprouts in tubers and chained tubers were all observed in large numbers in the 2021 plantings.

The identification of physiological age markers is therefore becoming essential for better management of storage and optimisation of planting for both the seed and ware.

Actions

Action 1 : characterisation of dormancy and the physiological ageing process of a panel of varieties and the development of marker measurements

Action 2 : study of variation in target markers during storage

Action 3 : validation of the predictive character of the markers identified in the context of a production scheme

TECHNICAL MEMO

Call for projects:
CASDAR Connaissances 2023

Project leader:



Project duration: 42 months

Start/End of project:
01/03/2024 – 31/08/2027

Partners:

- Comité Centre et Sud
- Arvalis
- UPJV – UMR Transfrontalière INRAE 1158 BIOECOAGRO
- UPJV – plateformes CRRBM et PFA
- IPJB–INRAe-OV Chimie Métabolisme

Other partners (excluding funding, associated with the steering committee)

- Bretagne Plants Innovation
- SIPRE

Financial support :



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