



inov3PT
SEED POTATO
FOR THE FUTURE

ExpoLots

Imaging to help inspect export batches

TECHNICAL MEMO

Project leader:



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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
- Official inspection service
- Collectors

Provider:

- Carbon Bee

Financial support :



FN3PT/inov3PT project managers:
Bernard Quéré, Karima Boucek

Project team:

Christophe Dargier, Yves Le Hingrat
(FN3PT/inov3PT)

Supervisors and experimentation
managers of growers organisations



Abstract

Grading of export batches is currently carried out visually on the basis of official photographic scales, taking into account the degree to which the surface of the tubers is covered by superficial alterations. Artificial intelligence (AI) has already been developed to recognise these alterations, but it now needs to be trained to be as effective as possible. This will enable the subsequent development of an embedded application on a smartphone with a specific photo-taking protocol. The aim of this project is to develop a smartphone application that meets export certification standards and enables inspectors to use it routinely as a decision-making tool for grading batches during certification by automatically classifying 100 washed tubers according to the levels of the official scale.

Actions

Preliminary ation: study of the feasibility of recognising the symptoms of common scab and rhizoctonia on the basis of previous work and extension to the recording of damage caused by wireworms, drafting of protocols to be implemented

Action 1 : data acquisition

Action 2 : computer annotations

Action 3 : training and consolidation of AI

Action 4 : development of a classification application

Action 5 : beta-test of the 2024 harvest application

Action 6 : promotion and communication



April 2024