This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement N° 773139” as requested by the GA, art. 29.4.
The main objectives of the project

1. To provide more complete and precise descriptions of the performance of diagnostic tests (including HTS)

2. To stimulate, optimize and strengthen the interactions between stakeholders in Plant Health for better diagnostic

3. To lay the foundations for structuring the quality and the commercial offers for plant health diagnostic tools
The project in brief

• **H2020 Budget**: 3 millions €
  • *Funding level* :
    • 100% for public organizations
    • 70% for private companies

• **Duration**: 3 years (01/05/18 to 30/04/21)

• **Coordination**: ANSES – Plant Health Laboratory
  • Coordinator: Géraldine Anthoine
  • Deputy coordinator: Mathieu Rolland

• **Consortium**: 16 partners

• **Workpackages**: 9
The partners in brief

- EPPO (European Region)
- FERA Ltd (UK)
- ULG (BE)
- ANSES SEDIAG (FR)
- NVWA ClearDetections WR (NL)
- LOEWE (DE)
- GIORIN (PL)
- NIB (SI)
- WBF BIOREBA (CH)
- UNITO IPADLAB CREA (IT)
- WBF BIOREBA}

(EPPO European Region)
The workpackages in brief

Diagram of the project structure
Workpackage 1 NIB – NVWA
Validation of tests for identified needs and specific pests

Validation of tests according to EPPO Standard PM 7/098

Performance characteristics of tests will be determined by organizing interlaboratory test performance studies (TPS) according to EPPO Standard PM 7/122.
Two rounds of TPS will be organised (open to non partners).

- 1st round in early 2019 for six prioritized pests (*Erwinia amylovora*, *Pantoea stewartii*, *citrus tristeza virus*, *plum pox virus*, *Fusarium circinatum*, and *Bursaphelenchus xylophilus*) in a range of matrices and for a range of methods.

- The second round will be performed in 2020 on pests and associated tests based on the needs of stakeholders and to the market analysed in the framework of WP4.
Workpackage 2: Liege University
Improvement of the validation process

• Improvement of validation approaches for diagnostic technologies by
  • Improving the current EPPO Standards for validation of tests for plant pest diagnostics (PM 7/098) and for the performance on interlaboratory comparisons (PM 7/122) by incorporating new statistical tools and predictive model;
  • Developing best practice guidelines;
  • Improving generic approaches for the validation and developing best practice guidelines for the validation and application of non-targeted (generic) diagnostic procedures, using high throughput sequencing (HTS) technologies for viruses detection, in plant pest diagnostics as a model.
### Workpackage 3: WUR
Quality assurance for reference materials for validation purposes

- quality guidelines for the production and dissemination of reference materials (building on Q-Collect)

### Workpackage 4: Fera
Analysis of demand for testing and impacts

Demand of stakeholders for current and future tests and operating procedures. Feedback used to prioritize pests for the second TPS.

Market impact assessments
Workpackage 5: Anses
Optimisation of proficiency evaluation for a horizontal assessment

Possibility to evaluate the proficiency of laboratories on tests (which have sufficient commonality in process and procedure) through a single PT. The needs of laboratories for PT will be collected and analysed in order to prepare guidelines on “horizontal” PT.

Workpackage 6: EPPO
Dissemination, communication and training

3 training workshops
development of webinars and video tutorials on the validation process.
Improved version of the validation database
Validation data made available
Workpackage 7: Ipadlab
Market exploitation of the project results
Includes all SME of the consortium, will promote the results of the project in connection with their commercial offer.

Foundations for an EU Association of the Plant Health Diagnostics Industry and an EU Plant Health Diagnostics Charter for Industry.

Contribution to dissemination workshops presenting use of kits validated in the framework of this project.

Workpackages 8 & 9 : Anses
‘more administrative workpackages’

Project’s coordination and ethics requirements
Achievements so far

• Survey on which diagnostic tests are used and which validation data already exist in the EPPO region for the prioritized pests. End of July early September
  • Validation reports gathered
  • Volunteers to participate to the TPS

• Survey on the improvement of the validation section of the EPPO database on diagnostic expertise (ended January 2019)

• Stakeholders survey (to be launched very soon)

• Invitation to participate to TPS – 1st round

• Other activities in progress...
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To know more visit our website https://www.valitest.eu/

Welcome to VALITEST

Introduction and context

Global food security is the most significant challenge mankind is facing in the 21st century due to the ‘perfect storm’ of a growing population (estimated to exceed 9 billion by 2050), climate change, demand for energy, increased pressure on natural resources, slowing of agricultural productivity growth and decline in the land area under agriculture. Additionally, although it is estimated that a 50% increase in food production will be needed by 2050, currently a quarter of the world’s crops are lost to pests, causing major economic losses and social impacts globally. Protecting crops against these losses from farm to fork is critical for achieving sustainable and competitive agriculture as well as for the protection of biodiversity and ecosystems. Establishing smart surveillance mechanisms is essential to the fulfilment of this important goal, as these enable effective monitoring and control of introduction and spread of plant pest.

Why companies should be interested?

- VALITEST aims to bring onto the market tests validated according to international standards and produced by small and medium size companies manufacturing diagnostic kits. Even if you are not a partner there will be opportunities for you to have your kits evaluated during the tests performance studies organized in WP1 (link).