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QuantiPest, a collaborative platform to help quantify injuries and pest populations in fields.

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(access: QuantiPest is available in the Virtual Laboratory, room « research platforms »)

> Aim of the QuantiPest Platform

Sound characterisation of injuries and pest populations is required to conduct cropping systems and to assess the efficacy of diverse control methods and IPM/ICM strategies. The aim of QuantiPest is to help design protocols to characterise pest injuries or pest populations by providing the most relevant information sources, methods and protocols. The platform is not aimed at listing all available protocols used to characterise pest populations and injuries at the field level, but rather to provide references, methods and tools to help the development of protocols adapted to specific objectives.

> Two methods to reach information

➢ Knowledge areas
Pedagogical and user-friendly pages (e.g. interactive links, pictures with detailed legends) are organised and accessible through a tree with 3 main areas:
• Pest and pest injury identification
• Pest and pest injury quantification
• Tools and methods for sampling

➢ Documentary management database
A documentary database indexes all relevant documents. An input mask allows users to feed in the database and a multicriteria research is proposed to facilitate the access to precise information.

➢ Benefits for researchers and crop protection specialists
• Help in the development of protocols. Time-saving in regard to the identification of available and synthetic information to characterise an injury, a pest population, or pests on a given crop.
• Identification of possible Standardisation of protocols. Data collection on experimental networks should be facilitated
• Support for methodological reflexions
• Promotion of grey literature and expertise inside the network

> Specific functionalities

➢ Collaborative functions
Users can comment and discuss the information provided by the platform, and suggest other approaches or references

➢ Picture-based tool to assist identification
An user-friendly tool can help users identify pests and pest injuries using a set of pictures

➢ Development and use of training programs
Training programs are provided to improve users’ ratings or identification skills of various pests or injuries. New training programs using various sets of multiple-choice questions based on pictures can also be developed

➢ Type of information
Website links, article/book references, pictures, documentation on sampling methods, methodological studies and methodological tools, protocols, scales for pest population and injury characterisation, numeric algorithms, computer aided programs for training purposes

Most of the resources needed are already available, within ENDURE research activities, or on outside of the network. They can also be created by working groups

The QuantiPest platform is an initiative of the INRA Integrated Pest Management Network.
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