Workshop 3: ENDURE's resources for IPM Research

Exhibit area 1

ENDURE's Virtual Laboratory including EuResist – providing information on equipment, collections, and experimental facilities (including field sites) within the ENDURE consortium, as a basis for collaborative research on IPM. EuResist provides access to research on pesticide resistance within partner laboratories and to sources of information and advice on resistance management.

Exhibit area 2

Weed Traits Database – a database of key physiological and ecological traits for 21 common European weeds, as a basis for modelling crop-weed interactions and predicting shifts in weed communities in response to agronomic practices.

Decision Support Systems – work to evaluate components of existing computer-based systems for various crops and to lay the foundation for new, unified models to aid the implementation of IPM.

Exhibit area 3

QuantiPest – a collaborative platform covering the identification and quantification of pests and pest injuries, and promoting the design and sharing of protocols for research on IPM.

Universal Simulator (UniSim) – new and versatile open-source software for ecological modelling, applicable to both research and teaching.

Exhibit area 4

EuroWheat – collated information and data on wheat disease management from several EU countries, including pathogens, cultivars, yields, fungicides and IPM strategies.

WHEATPEST – a dynamic model that simulates yield losses caused by injury profiles on wheat in different production systems, designed to help strategic decision-making and the setting of research priorities.

Exhibit area 5

Plant Genetic Resistance – a demonstration of three models of host-pathogen dynamics developed to study the evolution and dispersal of pathogens, and to design strategies for the optimal deployment of disease-resistant cultivars.

Landscape Ecology – a demonstration of the COSMOS model developed to simulate the dispersal and demography of the banana weevil in response to different spatial arrangements of habitats at the field and farm scale.