



# Workshop for inspectors on tools available for inspections



emphasisproject.eu

National Agri-food  
Innovation Campus,  
Sand Hutton, York

2017-12-13/15

Workshop 2017



fhrqjrsrgjfgj



## Table of contents

### 3. Workshop programme

#### 6. Book of Abstracts: Oral presentation

6. The role of EPPO in supporting inspection activities
7. Inspection of high risk wood packaging material in Austria
8. A development tool based on NearInfrared spectroscopy for ISPM 15 heat treatment effectiveness
9. Inspection of wood packaging material in the Netherlands
10. Plant and Tree Health Early Warning Systems – working with Citizen Scientists
11. Use of water sampling, pheromone and other trapping used for plant health inspection, a UK perspective
12. Support to plant health surveillance in the EU
13. Risk based sampling
14. Monitoring for threatening plant pathogens in Northern Ireland
15. Validating and using new methods for detecting plant diseases
16. Remote imaging applications in plant health
17. Early detection of invasive wood boring insects by detection dogs
18. Application of diagnostic tools at Heathrow and inland around the UK
19. LAMP based identification of quarantine insects at airports of Zürich and Geneva
20. EMPHASIS project presentation
21. PM3 Standards on phytosanitary procedures
22. Encouraging collaboration and information exchange

#### 23. Practical sessions

23. Practical session: Q&A on Unmanned Ariel vehicle (UAV) and data analysis
23. Practical session: Flying UVAs for data collection- practical demonstration
23. Practical session: Using LAMP techniques

#### 24. Co-design workshop based around detection

#### 25. Breakout sessions

25. Breakout session: needs of inspectors

#### 26. Brainstorming sessions

26. Brainstorming session: networking between inspectors

#### 27. List of participants

#### 31. Useful information



# Programme

## Workshop for inspectors on tools available for inspections

Wednesday, December 13



emphasisproject.eu

- 13:30 **Registration**
- 14:00 **Opening**
- 14:10 **The role of EPPO in supporting inspection activities**  
Françoise Petter (EPPO)

### Wood packaging material (Chair: Andreas von Felten, CH)

- 14:30 **Inspection of high risk wood packaging material in Austria**  
Hannes Krehan, AT
- 14:50 **Development of control tool based on Near Infrared Spectroscopy for ISPM 15 on wood packaging**  
Gabriel Robert, FR
- 15:10 **Inspection of wood packaging material**  
Bareld Nieuwenhuis, NL
- 15:30 *Coffee break and poster session*

### Tools for surveillance (including sampling) (Chair: Neil Boonham, GB)

- 16:00 **Plant and Tree Health Early Warning Systems – working with Citizen Scientists**  
Charles Lane, GB
- 16:30 **Use of water sampling, pheromone and other trapping used for plant health inspection, a UK perspective**  
Paul Beales, GB
- 16:50 **Survey guidelines for plant health**  
Sybren Vos, IT
- 17:10 **Risk based sampling**  
Dominic Eyre, GB
- 17:30 **Monitoring for threatening plant pathogens in Northern Ireland**  
Richard O'Hanlon, GB
- 17:45 **Validating and using new methods for detecting plant diseases**  
Roy Macarthur, GB
- 18:00 **Close**
- 18:20 *Bus depart to York, free evening to explore York*

Workshop 2017

# Programme

## Workshop for inspectors on tools available for inspections

Thursday, December 14

### Early detection methods (Chair: Françoise Petter, EPPO)

- 9:00 **Remote imaging applications in plant health**  
Paul Brown/ Andre Crowe, GB
- 09:15 **Practical session: Q&A on Unmanned Ariel vehicle (UAV) and data analysis**  
Facilitators: Lee Butler/ Paul Brown, GB
- 10:15 **Practical session: Flying UVAs for data collection- practical demonstration**  
Facilitators: Lee Butler/ Paul Brown, GB
- 11:15 *Coffee break + poster session*

### Early detection methods (cont.) (Chair: Dominic Eyre, GB)

- 11:45 **Early detection of invasive wood boring insects by detection dogs**  
Ute Hoyer-Tomiczek, AT
- 12.05 **Application of diagnostic tools at Heathrow and inland around the UK**  
Kelvin Hughes, GB
- 12.25 **Lamp based identification of quarantine insects at airports of Zürich and Geneva**  
Andreas von Felten, CH
- 12:45 *Lunch*

### Early detection methods (cont.) (Chair: Gianluca Governatori, IT)

- 14.00 **EMPHASIS project presentation**  
Neil Boonham, GB
- 14:20 **Practical session: Using LAMP techniques**  
Facilitator: Jenny Tomlinson, GB
- 15:30 *Coffee break and poster session*
- 16:00 **Co-design workshop based around detection**  
Facilitator: Neil Boonham, GB
- 18:00 *Close*
- 18:20 *Bus depart for workshop dinner*
- 22:30 *Bus depart from workshop dinner to York*



emphasisproject.eu



Workshop 2017

# Programme

## Workshop for inspectors on tools available for inspections

Friday, December 15



Chair: Charlotte Trontin, FR

09:00 **PM3 Standards on phytosanitary procedures**  
Rob Tanner, EPPO

### Breakout and brainstorming sessions

09:15 **Breakout session: Needs of inspectors**  
Facilitators: Françoise Petter and Rob Tanner,

11:00 *Coffee break*

11.30 **Encouraging collaboration and information exchange**  
Kelvin Huges, GB

11:45 **Brainstorming session: Networking between inspectors**  
Facilitator: Kelvin Hughes, GB

12.45 *Wrap up*

13:00 *Close*

13:15 *Bus depart for York*

### Acknowledgements

EPPO would like to acknowledge and thank the local organisers for all of their work in preparing and facilitating this inspectors workshop



Workshop 2017

# Book of Abstracts

## Oral Presentations

### The role of EPPO in supporting inspection activities

Françoise Petter

*European and Mediterranean Plant Protection Organization, Paris, France*

The European and Mediterranean Plant Protection Organization (EPPO) was created in 1951 to prevent the introduction of dangerous pests from other parts of the world, and limit their spread within the region if they were introduced. EPPO is one of the Regional Plant Protection Organizations recognized under the International Plant Protection Convention. Today, 51 European and Mediterranean countries (including the 28 members of the European Union) are members of the Organization. Key partners of EPPO are National Plant Protection Organizations (NPPOs), i.e. the official services which are responsible for plant protection in each country. One of the main results of EPPO's work are recommendations officially approved by EPPO's Council where all countries are represented. These recommendations are internationally considered as 'regional Standards'.

EPPO has a long standing and active program for Standard setting in several areas, including inspection. Inspection Standards for regulated pests are needed, in order to achieve a harmonized approach in the region. The work is now conducted by the Panel on Phytosanitary Inspections which was created in 2003. Panels are composed of specialists from member countries, proposed by their respective NPPOs. As of November 2017, 43 inspection Standards have been developed. Standards are written according to a "common format and content". The first drafts of Standards are prepared by an assigned expert author or by a drafting team and are reviewed by the relevant Panels and the Working Party on Phytosanitary Regulations. Inspection Standards are approved following the regular EPPO Standards approval procedure. This procedure involves a formal consultation of all EPPO Member countries. The inspection Standards developed so far are presented

To perform these activities, EPPO collect information and disseminates its to member countries via publications and the EPPO Global Database.



emphasisproject.eu



Workshop 2017



## Inspection of high risk wood packaging material in Austria

Hannes Krehan

*Federal Research & Training Centre for Forests, Natural Hazards & Landscape,  
Vienna, Austria*

Austria is an EU Member State without first entry points except airports. Most of wood- consignments including wood packaging material (WPM) from third countries imported by Austrian companies have to be inspected at the big sea ports (first EU-entry point) in the neighbouring countries. As EU-statistics show, the most effective phytosanitary inspection of WPM transported with goods in containers is the inspection carried out at approved places of destination. Too to bilateral agreements with other member states the Austrian NPPO carries out many phyto-inspections of regulated WPM from China at the place of destination using a plant health movement document according to the COMMISSION DIRECTIVE 2004/103/EC. Inspections of WPM in Austria can only be carried out at approved sites. Approved sites must have adequate light for inspection, fork-lift trucks with experienced drivers to unload and reload the shipping container, adequate space for storage of unloaded pallets and clear instructions for emergency measures to be taken if live pests are detected in the WPM. The National Plant Protection Organization (NPPO) in Austria uses an online registration system for regulated consignments including WPM from China. Every regulated consignment that needs a customs declaration in Austria is registered by the users (forwarders or importers) on the system along with the bill of lading or packing list. This allows inspectors to preselect consignments that are considered to be high risk for inspection. In the last 4 years Austria had a lot of findings of harmful living organism in WPM originating from China and unfortunately the situation is not improving, on the contrary, Austria has never had as many findings of pest-infested consignments from China as last year, in 95% of these had correct ISPM 15 markings.



emphasisproject.eu



Workshop 2017

## A development tool based on NearInfrared spectroscopy for ISPM15 heat treatment effectiveness

Gabriel Robert

*Institut Technologique FCBA, Champs-Sur-Marne, France*

The ISPM15 heat treatment is required for wood packaging for export and import to EU. Today, the only way to control the ISPM15 treatment is a mark on the wood, that doesn't guarantee the effectiveness of heat treatment. The French Agriculture and Food Ministry wishes to have a portable tool to control the ISPM15 heat treatment. Based on a preliminary study will showed that the infra-red spectroscopy was one way to control the ISPM15 heat treatment on the wood packaging, FCBA, with the financial contribution of Agriculture and Food ministry, works to develop a portable control tool that can be used by border control agent or phytosanitary inspector.

For this first step on the way to develop a perfect tool, we work on three softwoods species (maritime pine, scots pine, radiata pine) and poplar. With more than 3000 pieces of wood treated in 66 heats treatments cycles, we took infra-red spectroscopy measures before and after treatment and each month during 6 months. Based on the analysis of near infrared spectrum data base, we can predict the effectiveness ISPM15 heat treatment on wood. But this prediction is true only for the species of this study and it is now necessary to extend the scope to other wood species and to improve the robustness of the model with industrial data.



emphasisproject.eu



Workshop 2017



## Inspection of wood packaging material in the Netherlands

Bart Nieuwenhuis

*Netherlands Food and Consumer Product Safety Authority, NVWA, Wageningen, The Netherlands*

Wood packaging materials require phytosanitary regulations as the material can serve as a means of entry and spread of quarantine pests. In the Netherlands, customs procedures, import procedures, and inspections of wood packaging materials are conducted in line with ISPM 15. The presentation will introduce the electronic pre-registration of wood packing material used in the Netherlands (Client Import). In addition, the presentation will highlight cases where insect pests have been intercepted from wood packaging material imported into the Netherlands and highlight the inspection methods used to assess the safety of wood packaging material.



emphasisproject.eu



Workshop 2017

## Plant and Tree Health Early Warning Systems – working with Citizen Scientists

Charles Lane

*Fera, National Agri-Food Innovation Campus, Sand Hutton, York, United Kingdom*

Asking members of the public to carry out surveillance activities is part of a larger initiative referred to as 'citizen science'. The role of members of the public or amateur naturalists is a long-standing tradition in many countries - for example Charles Darwin was an amateur naturalist who developed ideas about evolution. Many of the large-scale surveys recording the presence or absence of organisms such as birds, dolphins, ancient trees, ladybirds, butterflies and moths are carried out by citizen scientists. However, these activities need to be managed carefully if data produced by citizen scientists are to be used to enhance government surveillance. Before launching on a major national campaign to harness citizen science to survey tree health and look for damaging plant pests and diseases several key elements needed to be in place:

- Raised awareness about plant pests and diseases and good biosecurity practice
- Training resources to help people identify host plants, the geographical position of the tree and how to identify pests and diseases of concern
- Reliable and robust reporting mechanisms for collecting the data – mobile phones and digital cameras, with their GPS and time functions, have an increasingly valuable role to play in this.

The application of citizen science has occurred in several countries with international collaboration. In the UK projects such as the OPAL Tree Health Survey and Observatree, and international projects such as the International Plant Sentinel Network and First Detectors in USA have all been successful in training Citizen scientists to survey and record the presence of harmful plant pests and diseases. These projects have enhanced, and not replaced, the work of government officials (tree and plant health inspectors) and play an important role as part of a country's early warning system for plant and tree health pests and diseases.



emphasisproject.eu



Workshop 2017

## Use of water sampling, pheromone and other trapping used for plant health inspection, a UK perspective

Paul Beales

*Animal and Plant Health Agency, Sand Hutton, York, United Kingdom*

The inspectorate's toolkit would not be complete without means to sample difficult media such as soil and water, inaccessible regions / large plants and vast areas under glass effectively, sensitively and in a timely manner without the use of trapping tools. The inspectorate have carried out trials in using a range of techniques from sticky traps placed under glass to bags of bait plants immersed under water, some of which are now use routinely in the field. Most of the methods discussed are artificial or placed by the inspector at the test location, however some naturally growing plants such as *Solanum dulcamara* (woody nightshade) can be used where it grows naturally to detect the pathogen *Ralstonia solanacearum*, (potato brown rot). This talk will pick up on a number of these systems including bait testing of water for *Phytophthora ramorum*, sticky traps to detect *Liriomyza* spp., pheromone traps for Asian longhorn beetle and red palm weevil, spore trapping for *Hymenoscyphus fraxineus* and will describe their effectiveness as inspection tools and future potential.



emphasisproject.eu



Workshop 2017

## Support to plant health surveillance in the EU

Sybren Vos

*European Food Standard Agency, Parma, Italy*

The European Commission is requesting EFSA to facilitate the Member States in their planning and execution of their survey activities. In particular, EFSA is asked to provide scientific and technical guidelines in the context of the new plant health regime, Regulation (EU) 2016/203, where prevention and risk targeting are given an extra focus and the European Commission co-financing programme of the annual MS survey activities for pests of EU relevance, Regulation (EU) No 652/2014. In order to address this mandate EFSA will deliver by the end of 2019: (i) 50 pest specific data-sheets that contain practical information required for preparing survey design; (ii) tailor to plant health existing statistical tools at EFSA to estimate the sample size and design the sampling strategy (e.g. RiBESS+ & SAMPELATOR); (iii) survey guidelines for 3 different pests that will be case studies to be developed in collaboration with the EU member states; (iv) training to the member states on underpinning statistics and on the use of the tools, and; (v) the review and adaptation if needed of the existing EU guidelines for surveillance of *Xylella fastidiosa*.



emphasisproject.eu



Workshop 2017

## Risk Based Sampling

Dominic Eyre

*Defra, Sand Hutton, York, the United Kingdom,*

Risk Based Sampling (RBS) is recommended in ISPM 24 and 31 and is also a requirement of the Trade Facilitation Agreement. A range of Risk Based Sampling schemes have been implemented around the world such as the EU's reduced checks system. The EU's reduced checks system is based on trades (country / commodity combinations) but it is also possible to carry out RBS based on importing or exporting companies. This would aid the incorporation of incentives / disincentives for trading in consignments with low / high levels of pests. NAPPO and the USDA organised an international symposium on RBS in June 2017. This presentation will describe some of the examples of RBS presented at the conference and some of the associated science.



emphasisproject.eu



Workshop 2017

## Monitoring for threatening plant pathogens in Northern Ireland

Richard O'Hanlon

Agri-Food and Biosciences Institute, Northern Ireland, UK

Over 1000 ha of larch (mostly *Larix kaempferi*) has been removed in Northern Ireland due to *Phytophthora ramorum* infection. Despite removal of infected trees, and susceptible hosts within a buffer zone the disease continued to spread westward from its initial findings in the east of the province in 2011. Cryptic infection and asymptomatic sporulation have been suggested as reasons for the continued spread despite eradication actions. At one previously infected forest site in County Down, plant material has been collected and streams were baited for *Phytophthora* on six occasions since July 2017. Rainwater trapping was also carried out to assess pathogen spread in rain and soil splash, using traps at ground level (low level) and 1 metre above (high level) ground level. A total of 121 samples were tested using *Phytophthora* selective media in the laboratory. From these, 47 *Phytophthora*-like cultures were isolated, so far being identified to at least 6 species. This includes the regulated organism *Phytophthora ramorum*, as well as *P. chlamydospora*, *P. gonapodyides*, *P. lacustris*, *P. litoralis*, *P. taxon oaksoil*. Almost 65% of stream baits were positive for *Phytophthora*, while just 35 and 16% of low and high level traps were positive, respectively. *Phytophthora ramorum* was detected in a stream on one occasion, infecting a *L. kaempferi* tree and also in a low-level trap nearby the infected Larch tree. This work builds upon work previously carried out in Ireland, where rainwater and stream baiting was used to assess the efficacy of eradication treatments for *P. ramorum* in larch forests. Both projects indicate that spore monitoring in rainwater and streams is a useful method of detecting *P. ramorum* spread.



emphasisproject.eu



Workshop 2017

## Validating and using new methods for detecting plant diseases

Roy Macarthur

*Fera, National Agri-Food Innovation Campus, Sand Hutton, York, United Kingdom*

A new diagnostic method is one part of a system for detecting and dealing with a plant disease which may include other test methods and the expert assessment of symptoms. If the performance of a new test method is assessed in parallel with other methods and assessments of symptoms a fuller assessment of the value of the test method can be made. The validation of a method for the rapid detection of *Phytophthora ramorum* is presented to demonstrate how data on method performance can be used to provide information on the value, or otherwise, of the test method for the inspection of plants during an outbreak, and in surveillance to provide early detection that an outbreak has occurred. We provide examples of how different applications of a new detection method in the same scenario can improve or degrade the performance of the detection system, or have no effect on performance at all.



emphasisproject.eu



Workshop 2017



## Remote imaging applications in plant health

*Paul Brown, Andrew Crowe*

*FERA, National Agri-Food Innovation Campus, Sand Hutton, York, United Kingdom*

Understanding tree species distribution and health of woodlands is fundamental to disease and pest control, tree/woodland/forest management, valuation of ecosystem services (ESS) and carbon storage, wildlife habitat modelling and urban and transport infrastructure modelling, whether on a small local authority scale or nationwide. Since the 1970's, Dutch elm disease has devastated the elm population killing over 60 million trees and continues to be a major problem. More recently Chalara dieback of Ash, first seen in the UK in 2012 has already destroyed many trees and threatens the native population. These events highlight the critical need for improved tree species distribution maps. An annual map of Ash distribution could monitor the rate at which we are losing this fundamental native species. These maps could show the national picture and help coordinate large and local scale programmes to manage disease spread. Fera have been working on remote sensing plant health applications for a number of years, including inspection targeting and agricultural crop analysis. Fera are highly experienced in tree species classification and health analysis from remotely sensed data acquired from UAVs (drones) and satellites. This talk will many be concerned with our forestry work, from small areas woodland analysis of UAV acquired data for inspection targeting to our most recent collaborative project of scaling up these small area studies to regional/national areas. The fusion of UAV and satellite (specifically Sentinel-2) data and the use of statistical/machine learning methodology will be discussed, describing how we are using small area UAV classifications to train Sentinel-2 satellite data.



emphasisproject.eu



Workshop 2017

## Early detection of invasive wood boring insects by detection dogs

Ute Hoyer-Tomiczek, Gabriele Sauseng, Gernot Hoch

*BFW – Austrian Research Centre for Forests, Department of Forest Protection, Vienna, Austria*

Surveillance is a key element in management of invasive alien pests, especially of wood boring insects such as the Asian longhorn beetle *Anoplophora glabripennis* and the citrus longhorn beetle *Anoplophora chinensis*. Visual detection of infestation of wood boring insects is particularly challenging because symptoms may be hidden or removed due to environmental influences. As one complementary method, dogs have been trained in Austria and employed for the detection of both Asian longhorn beetles since 2009. Such trained dogs are able to detect the scent of all development stages, empty galleries, exit holes, frass and ovipositions of *A. glabripennis*/*A. chinensis* in standing trees, in imported plants and in wood packaging material. The method was evaluated in two test series using 10 and 14 dogs, respectively. In the first test series, *A. glabripennis* scent material (frass, living larva, or infested wood plus living larva) was placed in hollow building blocks invisible for dogs and handlers. Overall sensitivity was 85-93 % (correct positives of all positives), and specificity was 79-94 % (correct negatives of all negatives). More realistic but also standardized conditions were used in the second test series. *A. glabripennis* frass and wood shavings were hidden in ground vegetation at the base of trees, in tubes at a height of 1.8 m on young trees, and in crevices of old orchard trees at a height of 1.8 m, respectively. Overall sensitivity was 75-88 %, specificity was 85-96%. Dog detection is regularly used in monitoring of *A. glabripennis* outbreak areas in Austria, Germany, Switzerland, and France as well as at import inspections in Austria, Germany and Switzerland. It is included as a complementary detection method in the revised German guidelines for *A. glabripennis* control as well as in the EPPO standards PM 9/15 and PM 9/16 of procedures for official control of *A. glabripennis* and *A. chinensis*, respectively .



emphasisproject.eu



Workshop 2017

## Application of diagnostic tools at Heathrow and inland around the UK

Kelvin Hughes

*Animal and Plant Health Agency, Sand Hutton, York, United Kingdom*

The varied and changing nature of plant health inspection and international trade will ensure its inspectors will probably always rely on their expert knowledge, knife and hand lens to find pests and disease at points of sampling. That said their work is increasingly being supported by an increasing range of tools to better inform which consignments to hold, release, or take other actions on. At the simplest level this is through providing inspectors with better access to information such as pictorial guides through a range of portable technologies and this extends wider to the use of various diagnostic tools.

Over many years APHA inspectors at Heathrow and beyond have been at the forefront of applying many new approach and technologies. Doing so not only helps them, but also in turn aids laboratory diagnosis, the flow of trade and reduces the introduction of new pests. This talk describes how a number of technologies have and are being been deployed by APHA's Plant Health and Seeds Inspectorate. It also briefly covers other which could have future potential and some of the problems which have hindered frontline deployment in the past.



emphasisproject.eu



Workshop 2017

## LAMP based identification of quarantine insects at airports of Zürich and Geneva

*Andreas von Felten<sup>1</sup>, Hanspeter Diem<sup>1</sup>, Simon Blaser<sup>2</sup>, Jürg E. Frey<sup>2</sup>, Andreas Bühlmann<sup>3</sup>*

<sup>1</sup>*Federal Office for Agriculture, Swiss Federal Plant Protection Service (SPPS)*

<sup>2</sup>*Agroscope, Method Development and Analytics, Waedenswil;* <sup>3</sup>*Agroscope, Plant and Plant Products, Waedenswil*

The airports in Zürich and Geneva are the two most important points of entry in Switzerland for consignments containing plants and plant products from third countries, subjected to phytosanitary import inspection. During import inspections, the plant health inspectors regularly find insects suspected to be quarantine organisms. In order to take appropriate measures, it is necessary to identify the intercepted insects to a level where it is possible to differentiate between quarantine and non-quarantine insects. As a differentiation by morphological identification can be very difficult, DNA-barcoding was used in the past for the identification of the intercepted insects. Considering the fact that plant imports are often perishable commodities such as fruits or vegetables, a delay of two to three days until the laboratory results are available can result in substantial loss of value of the blocked commodity and cost for storing to the importing company. To achieve faster identification results of intercepted consignments with suspected quarantine insects, the Swiss plant Protection Service SPPS and the reference laboratory Agroscope launched in 2015 a project to implement rapid molecular on-site tests for the most frequently intercepted quarantine insects at the airports of Zürich and Geneva. The loop-mediated DNA amplification (LAMP) method, which allows on-site detection of target insect species, was chosen as method to use. In close collaboration between researches from Agroscope and the phytosanitary inspectors at the points of entry LAMP methods were adapted so they can be used at the points of entry by inspectors with minimal laboratory training.



emphasisproject.eu



Workshop 2017

## EMPHASIS project presentation

Neil Boonham

*Fera, National Agri-Food Innovation Campus, Sand Hutton, York, United Kingdom*

The overall aim of the EMPHASIS project is to provide integrated response measures to predict, prevent and protect European agriculture and forestry sectors and natural ecosystems from native and alien pest threats. The effectiveness of these solutions will be assessed, validated and promoted through co-innovative research and demonstration in line with end user needs and capacities. The talk will focus on WP2 and the development of targeted and non-targeted methods for the detection and surveillance of quarantine pathogens and pests. We have focused on the development of LAMP tests for a range of targets including the development of sub-speciation assays for *Xylella fastidiosa*, using a comparative genomics based design approach. Ultimately the aim is to bring the validated assays to market as commercial kits, making them available to NPPOs around the world. Non-targeted detection is focusing on the development of meta-barcoding approaches to surveillance for airborne fungal spores and insect pests following trapping. The aim is to profile the species present in the traps and provide broad spectrum data on the presence of quarantine and other pathogens moving in a particular location.



emphasisproject.eu



Workshop 2017

## PM3 Standards on phytosanitary procedures

Rob Tanner

*European and Mediterranean Plant Protection Organization, Paris, France*

The EPPO Panel on Phytosanitary Inspections is responsible for (1) developing inspection procedures, including sampling for visual inspection and laboratory testing, (2) to review all phytosanitary requirements recommended by EPPO and identify and prioritize those which depend on an 'EPPO-recommended procedure', (3) to review existing PM3 Standards and plan their revision and, (4) to determine priorities for new Standards and to identify a Steward responsible for the preparation of the Standard, and to suggest possible experts to participate in an ad hoc group. In recent years, the Panel has produce a number of PM3 Standards related to inspections of consignments and inspections of places of production. This presentation will highlight the EPPO process to develop these Standards and detail their scope, application and use.



emphasisproject.eu



Workshop 2017

## Encouraging collaboration and information exchange

Kelvin Hughes, APHA, *National Agri-Food Innovation Campus, Sand Hutton, York, United Kingdom*

Many different methods and resources exist for disseminating information to and amongst plant health professional at various levels be this at a local, national or international level. This session focusses from a personal perspective at which ones are particularly pertinent for UK plant health inspectors, and in many cases will be applied and utilised more widely. It also describes some other networks which are used in European plant health and their activities.



emphasisproject.eu



Workshop 2017



# Book of Abstracts

## Practical sessions

Thursday 14<sup>th</sup> December  
Early detection methods

### Practical session: Q&A on Unmanned Ariel vehicle (UAV) and data analysis

Paul Brown, Lee Butler

*FERA, National Agri-Food Innovation Campus, Sand Hutton, York, United Kingdom*

A showcase of Fera operational UAV capability – Fera’s UAVs will be out on show for delegates to view and ask questions to Paul and Lee about operating drones for plant health. Videos will be displayed of Fera’s crops work and Asian Hornet Nest detection using Thermal UAV sensors.

### Practical session: Flying UVAs for data collection- practical demonstration

Lee Butler, Paul Brown

*FERA, National Agri-Food Innovation Campus, Sand Hutton, York, United Kingdom*

Weather dependent – A practical demonstration of one of Fera’s UAVs flying a typical survey used for data collection and explanation of the factors to consider when planning a UAV survey.

### Practical session: Using LAMP techniques

Jenny Tomlinson

*FERA, National Agri-Food Innovation Campus, Sand Hutton, York, United Kingdom*

During the session participants will gain hands-on experience of the use of LAMP for rapid DNA-based detection of plant pathogens using the Genie II instrument.



emphasisproject.eu



Workshop 2017

Thursday 14<sup>th</sup> December  
Early detection methods

## Co-design workshop based around detection

Neil Boonham

*Fera, National Agri-Food Innovation Campus, Sand Hutton, York, United Kingdom*

The session will focus on a hypothetical scenario of an outbreak of a quarantine pest and invite the participants to think about the research, evidence gathering or direct actions they would fund, before, during and after an outbreak. The aim is to engage the participants in understanding what information may be needed at different stages of an outbreak and why, avoiding the pitfall of jumping to technological solutions.



emphasisproject.eu



Workshop 2017

# Book of Abstracts

## Brain Storming Sessions

Friday 15<sup>th</sup> December  
Breakout session

### Needs of inspectors

Françoise Petter and Rob Tanner

*European and Mediterranean Plant Protection organisation, Paris, France*

With increased trade on a global scale coupled with an increase in the volume of commodities arriving at ports of entry, the needs of plant health inspectors are constantly changing. Such needs may include access to, and training in technologies to improve detection of pest species and/or access to key information which will improve the way we work. Within this interactive session, participants will be divided into small group and discuss key areas in phytosanitary inspections where additional tools or information will help support their roles.

Specifically, each group will discuss and answer the following questions:

- 1) What Standards relating to phytosanitary inspections would you like to see produced to improve the way you work?
- 2) What inspection tools do you most commonly work with and do you have ideas for new tools to improve your everyday work life?
- 3) What areas of training do you consider you would most benefit from to improve your everyday work life?
- 4) Where are the main information gaps in phytosanitary inspections, detection and surveillance?

Towards the end of the sessions each group will present to the whole group their main conclusions and this information will be highlighted at the next EPPO Panel on Phytosanitary Inspections.

Technique used: World Café

*Some explanation on the World Café*

*A World Café or Knowledge Café is a structured conversational process in which groups of people discuss a topic at several tables, with individuals switching tables periodically and getting introduced to the previous discussion at their new table by a "table host". A café ambience is created in order to facilitate conversation. As well as speaking and listening, individuals are encouraged to write or doodle on the tablecloth so that when people change tables, they can see what previous members have written as well as hearing the table host's view of what has been happening.*



emphasisproject.eu



Workshop 2017

# Book of Abstracts

Friday 15<sup>th</sup> December  
Brainstorming session

## ***Networking between inspectors***

*Kelvin Hughes*

*Animal and Plant Health Agency, Sand Hutton, York, United Kingdom*

Through a selection of exercises this session will try and bring together some of the ideas raised during the workshop around inspector networking. It will also attempt to identify areas which could be future developed and how these may be taken forward.



emphasisproject.eu



Workshop 2017

# EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

Workshop for inspectors on tools available for inspection

York (GB), 2017-12-13/15

## PARTICIPANTS

Austria	HOYER-TOMICZEK Ute (Ms)	Federal Research & Training Centre for Forests, Natural Hazards & Landscape, Seckendorff-Gudent-Weg 8, 1131 Vienna, Austria ute.hoyer@bfw.gv.at
	KREHAN Hannes (Mr)	Federal Research & Training Centre for Forests, Natural Hazards & Landscape, Seckendorff-Gudent-Weg 8, 1131 Vienna, Austria hannes.krehan@bfw.gv.at
Belgium	AVONTS Lazlo (Mr)	Federal Agency for the Safety of the Food Chain - Belgium, Sint-Antoniusweg kaai 1795, B-9130 Kallo, 9130 Kallo, Belgium lazlo.avonts@favv.be
	BRANTEGEM Geert (Mr)	Belgian Agency for the safety of the Food Chain, FAVV - LCE OVB Zuiderpoort- Blok B 10° verd.Gaston Crommenlaan 6, 9050 Ledeborg - Gent, Belgium geert.brantegem@favv.be
	DEVLIEGHERE Sabina (Ms)	Federal Agency for the Safety of the Foodchain, Primary Production, Plants & Plant Products, Italiëlei 4, Box 18, B-2000 Antwerp, Belgium sabina.devlieghe@favv.be
	JENNES Wim (Mr)	Federal Agency for the Safety of the Food Chain, Kruidtuinlaan 55, 1000 Brussels, Belgium wim.jennes@favv.be
Czech Republic	SAVELKOVA Katerina (Ms)	Central Institute for Supervising and Testing in Agriculture, Hroznová 63/2, 656 06 Brno, Czech Republic katerina.savelkova@ukzuz.cz
	SLANINA Michal (Mr)	Central Institute for Supervising and Testing in Agriculture, Konečná 1930, 580 01 Havlickuv Brod, Czech Republic michal.slanina@ukzuz.cz
	ZAHRADNIKOVA Pavla (Ms)	Central Institute for Supervising and Testing in Agriculture , Hroznová 2, Brno, 65606 Brno, Czech Republic pavla.zahradnikova@ukzuz.cz
Denmark	HENRIKSEN Signe (Ms)	The danish AgriFish Agency, Augustenborg Slot 3, 6440 Augustenborg, Denmark sihenr@lfst.dk
Estonia	PIHLA Kaja (Ms)	Estonian Agricultural Board, Teaduse 2, Saku, Harjumaa, Estonia, 75501 Saku, Estonia kaja.pihla@pma.agri.ee
Finland	VIHERVUORI Liisa (Ms)	Finnish Food Safety Authority, Finnish Food Safety Authority Evira Mustialankatu 3, 00790 Helsinki , Finland liisa.vihervuori@evira.fi
France	COLNARD Odile (Ms)	French Ministry of agriculture and food, 251, rue de Vaugirard, 75015 Paris, France odile.colnard@agriculture.gouv.fr
	ROBERT Gabriel (Mr)	Institut Technologique FCBA, 10 rue Galilée, 77420, Champs-Sur-Marne, France gabriel.robert@fcba.fr
	TRONTIN Charlotte (Ms)	French Ministry of agriculture and food, Arboriculture fruitière et Passeports phytosanitaires européens - Bureau de la santé des végétaux -, 251 rue de Vaugirard, 75732 Paris Cedex 15, France charlotte.trontin@agriculture.gouv.fr
Germany	NOACK Marleen (Ms)	Landesamt für Ländliche Entwicklung, Landwirtschaft und Flurneuordnung, Müllroser Chaussee 54, 15236 Frankfurt (oder), Germany marleen.noack@lelf.brandenburg.de
	PFANNENSTILL Toralf (Mr)	Landesamt für Ländliche Entwicklung, Flurneuordnung und Landwirtschaft, Müllroser Chaussee 54, 15236 Frankfurt (oder), Germany toralf.pfannenstill@lelf.brandenburg.de

# List of Participants

	STEINMOELLER Silke (Ms)	Julius Kühn-Institute (JKI), Institute for National and International Plant Health, Messeweg 11/12, 38104 Braunschweig, Germany silke.steinmoeller@julius-kuehn.de
Ireland	JONES Steven (Mr)	European Commission, DG SANTE, European Commission, Directorate for Health, Audits and Analysis Grange, Meath Dunsany, Ireland steven.jones@ec.europa.eu
	SURMAN William (Mr)	European Commission, Grange, Dunsany, Co. Meath, Ireland, (GRAN 00/229), C15DA39 Grange, Ireland william.surman@ec.europa.eu
Italy	GOVERNATORI Gianluca (Mr)	ERSA - Agenzia regionale per lo sviluppo rurale, Via Montesanto, 17, I-34170 Gorizia, Italy gianluca.governatori@ersa.fvg.it
Jersey	POINGDESTRE Marc (Mr)	Agricultural Inspection, Environmental Protection, States of Jersey, Department of the Environment, Howard Davis Farm, La route de la Trinité, JE3 5JP Trinity, Jersey m.poingdestre@gov.je
Latvia	GUNARS Tilitis (Mr)	Food and Veterinary Service, 30 Peldu Street, LV-1050 Riga, Latvia gunars.tilitis@pvd.gov.lv
	VALDENAS Alise (Ms)	State Plant Protection Service of Latvia, Lielvārdes iela 36, LV-1006 Riga, Latvia alise.valdena@vaad.gov.lv
Lithuania	KRAGNYTE Irma (Ms)	State Plant Service under the Ministry of Agriculture, Ozo str. 4A, 08200 Vilnius, 08200 Vilnius, Lithuania irma.kragnyte@vatzum.lt
Luxembourg	FABER Monique (Ms)	ASTA - Administration des Services Techniques de l'Agriculture Service de la Protection des Végétaux, B.P. 1904 - 16, rue d'Esch, L-1019 Luxembourg, Luxembourg monique.faber@asta.etat.lu
Malta	GRECH Fiona (Ms)	Plant Protection Directorate-MESDC, Plant Biotechnology Centre 110 Triq Annibale Preca, LJA 1915 Lija, Malta fiona.grech@gov.mt
Netherlands	DEN HARTOG Wietse (Mr)	NPPO the Netherlands (NVWA), Geertjesweg 15, 6706ea Wageningen, Netherlands w.g.s.a.denhartog@nvwa.nl
	NIEUWENHUIS Barend Hendrik Jan (Mr)	Netherlands Food and Consumer Product Safety Authority, NVWA, Geertjesweg 15 6706EA Wageningen The Netherlands, 6706EA Wageningen, Netherlands b.h.j.nieuwenhuis@nvwa.nl
Norway	BERGKVIST Camillia (Ms)	Norwegian Food Safety Authority, Lakkegata 53, 0187 Oslo, Norway anber@mattilsynet.no
	NORDBERG Hannah Kate (Ms)	Norwegian Food Safety Authority, Jærveien 12, 4306 Sandnes, Norway hakho@mattilsynet.no
Poland	BUTRYMOWICZ Janina (Ms)	Main Inspectorate of Plant Health and Seed Inspection - Central Laboratory, Zwirki i Wigury 73, 87-100 Toruń, Poland j.butrymowicz@piorin.gov.pl
	JURKIEWICZ Sylwia (Ms)	Main Inspectorate of Plant Health and Seed Inspection Service, Jana Pawła II 11 Avenue, 00- 828 Warsaw, Poland s.jurkiewicz@piorin.gov.pl
Slovakia	HIRES Zsolt (Mr)	The Central Control and Testing Institute in Agriculture, ÚKSÚP v Bratislave Matúškova 21, 833 16 Bratislava, Slovakia zsolt.hires@uksup.sk
	ŠČIPÁK Ján (Mr)	Central controlling and testing Institute in Agriculture, Matúšková 21, 833 16 Bratislava, Slovakia scipak.jan@gmail.com
Spain	SANCHEZ PENA Gerardo (Mr)	Dirección General de Sanidad de la Producción Agraria, Almagro 33, 28003 Madrid, Spain gsanchez@mapama.es

# List of Participants

Sweden	AULIN Bo (Mr)	Swedish Board of Agriculture, Inspection Division, Valhallavägen 195, 10648 Stockholm, Sweden bo.aulin@jordbruksverket.se
Switzerland	SEBESERI Otto (Mr)	Federal Office of Agriculture FOAG, Flühbergweg 12, 4107 Ettingen, Switzerland otto.sebeseri@blw.admin.ch
	VON FELTEN Andreas (Mr)	Federal Office for Agriculture, Mattenhofstrasse 5, CH-3003 Bern, Switzerland andreas.vonfelten@blw.admin.ch
Turkey	GÖREN Şehriban (Ms)	General Directorate of Food and Control, Plant and Plants Products Border Control Department, General Directorate of Food and Control Eskişehir Yolu, 06530 Ankara, Turkey sehriban.goren@tarim.gov.tr
United Kingdom	BANDALI Sameer (Mr)	Animal & Plant Health Agency, - PHSI, Sameer Bandali DEFRA, Abbey House 450 Bath Road, Longford London, United Kingdom sameer.bandali@apha.gsi.gov.uk
	BARBROOK Jane (Ms)	Animal & Plant Health Agency, c/o APHA, The National Agri-food Innovation Campus Room 11G03, Sand Hutton, YO41 1LZ York, United Kingdom Tel: +44-07774751475 - jane.barbrook@apha.gsi.gov.uk
	BEALES Paul (Mr)	Fera Science Limited, Room 11G03, National AGRIC Centre Sand Hutton, YO41 1LZ Yorl, United Kingdom Tel: +4420-80262483 - paul.beales@apha.gsi.gov.uk
	BOONHAM Neil (Mr)	Fera Science Limited, Sand Hutton, YO41 1LZ York, United Kingdom neil.boonham@fera.co.uk
	BROWN Paul (Mr)	Fera Science Limited, Sand Hutton, YO41 1LZ York, United Kingdom, United Kingdom Paul.Brown@fera.co.uk
	BUTLER Lee (Mr)	Fera Science Limited, Sand Hutton, YO41 1LZ York, United Kingdom, United Kingdom Lee.Butler@fera.co.uk
	DENNIS Christopher (Mr)	Animal Plant Health Agency, Nafic, Sand Hutton, York, YO10 4PX York, United Kingdom chris.dennis@apha.gsi.gov.uk
	EYRE Dominic (Mr)	Department for Environment Food & Rural Affairs (DEFRA), Plant Health Biologist/PLHA, Sand Hutton, YO41 1LZ York, United Kingdom dominic.eyre@defra.gsi.gov.uk
	FINLAY John (Mr)	Department of Agriculture, Environment and Rural Affairs, Northern Ireland, Room 1032 Dundonald House Upper Newtownards Road, BT4 3SB Belfast, United Kingdom john.finlay@daera-ni.gov.uk
	HAMILTON Stephen (Mr)	Forest Service Northern Ireland, Room 1019, Dundonald House, Upper Newtownards Road., BT4 3SB Belfast, United Kingdom stephen.hamilton@daera-ni.gov.uk
	HAZLITT Nick (Mr)	Forestry Commission, 34 Brassey Road, SO226SB Winchester, United Kingdom nick.hazlitt@forestry.gsi.gov.uk
	HUGHES Kelvin (Mr)	Food and Environment Research Agency, Sand Hutton, YO41 1LZ York, United Kingdom kelvin.hughes@apha.gsi.gov.uk
	LANE Charles (Mr)	Fera Science Limited, Sand Hutton, YO41 1LZ York, United Kingdom Charles.Lane@fera.co.uk
	LE COUTEUR Aaron (Mr)	States of Jersey, Howard Davis Farm, La Route de la Trinite Jersey, JE35JP Channel Islands, United Kingdom a.lecoureur@gov.je
	MACARTHUR Roy (Mr)	Fera Science Limited, Sand Hutton, YO41 1LZ York, United Kingdom Roy.Macarthur@fera.co.uk
	MCCANN Derek (Mr)	Animal and Plant Health Agency, Lutra House, Walton summit Bamber bridge, Preston, Lancs Pr5 8bx, PR5 8BX Preston, United Kingdom derek.mccann@apha.gsi.gov.uk
	NIANIAKA Dafni (Ms)	Forestry Commission Scotland, Forestry Commission Scotland, Bothwell House, Caird Park, ML3 0QA Hamilton, United Kingdom dafni.nianiaka@forestry.gsi.gov.uk



# List of Participants

	NIXON Thomas (Mr)	Animal and Plant Health Agency, APHA, Lutra House, Dodd Way, Walton Summit, Bamber Bridge, Lancashire, PR5 8BX Preston, United Kingdom thomas.nixon@apha.gsi.gov.uk
	O'HANLON Richard (Mr)	Agrifood and Biosciences Institute, Newforge lane, Belfast, Northern Ireland, BT60hp Belfast, United Kingdom richard.ohanlon@afbini.gov.uk
	PURSER Ewan (Mr)	Forestry Commission Scotland, 231 Corstorphine Road, EH12 7AT Edinburgh, United Kingdom ewan.purser@forestry.gsi.gov.uk
	TOMLINSON Jenny (Ms)	Fera Science Limited, Sand Hutton, YO41 1LZ York, United United Kingdom Jenny.Tomlinson@fera.co.uk
EPPO	PETTER Françoise	OEPP/EPPO, 21 boulevard Richard Lenoir, 75011 Paris, France petter@epo.int
	TANNER Rob	OEPP/EPPO, 21 boulevard Richard Lenoir, 75011 Paris, France tanner@epo.int
	LUCCHESI Valerio (Mr)	OEPP/EPPO, 21 boulevard Richard Lenoir, 75011 Paris, France lucchesi@epo.int

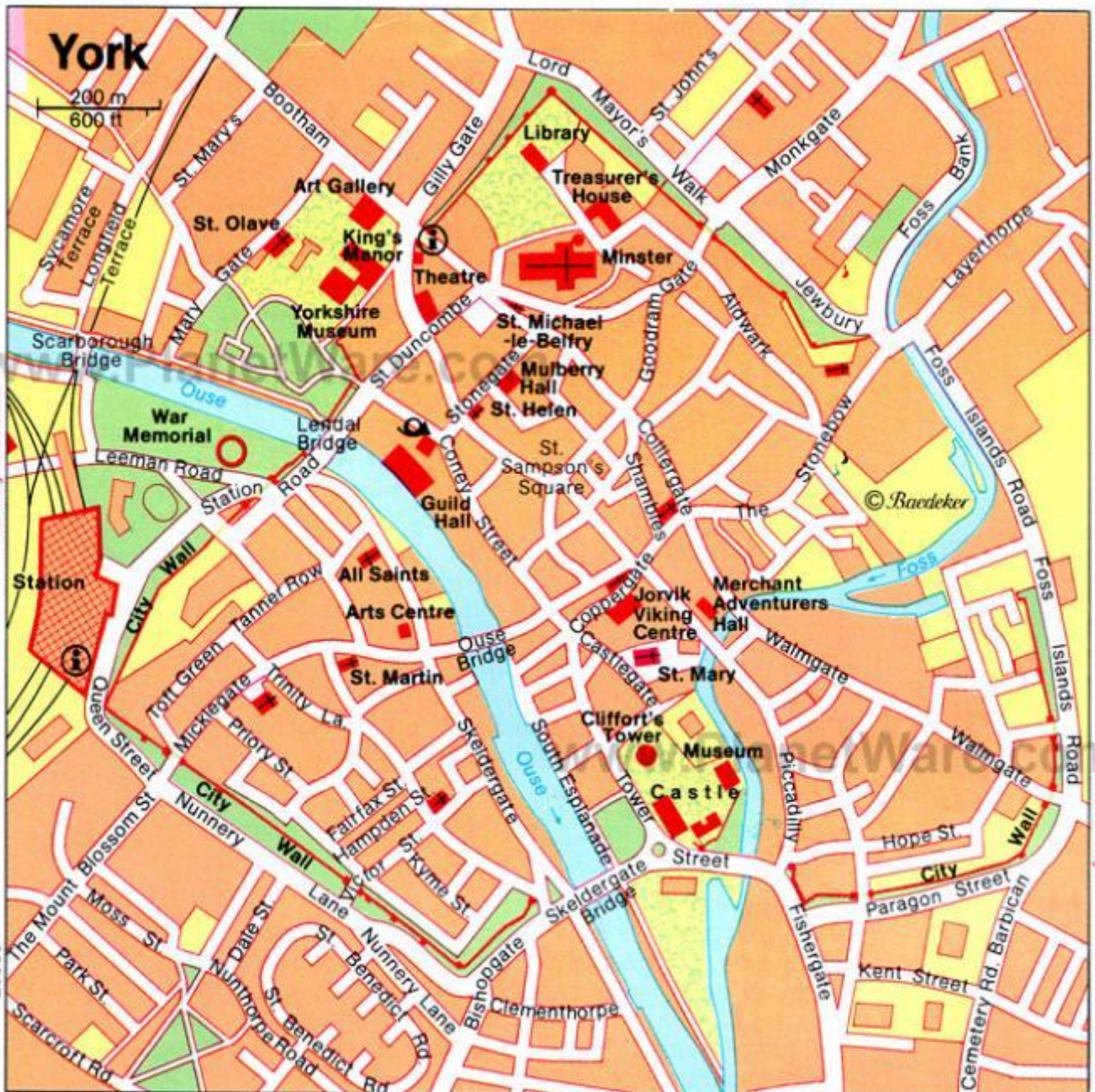
# Useful Information

NAFIC is located adjacent to the A64 about 8 miles/11km north east of York City Centre. NAFIC is easily accessible by road, rail and air. For a location map and further details on how to find us please visit [www.nafic.co.uk](http://www.nafic.co.uk)

## Bus pick-up (York to Workshop venue (Sand Hutton))

Transport from York to Sand Hutton: the bus will pick up all delegates from York as follows:

**12:50, Wednesday 13<sup>th</sup> December:** The bus will pick up delegates at Memorial Gardens (left is York Station and the pick up point is near the War Memorial on Leeman Road, see map below) at 12:50; and the Holiday Inn Express (Malton Road, YO32 9TE) at 13:10 and take them to the workshop venue (Contact number: Valerio Lucchesi 0033 632145161). **Please be on time as the bus will only wait for 10 minutes at Memorial Gardens.**



## Useful Information

**Thursday 14<sup>th</sup> and 15<sup>th</sup> December:** The bus will pick up delegate at three meeting points on the way to Sand Hutton:

**07:45: Ibis Hotel (77, The Mount, York, YO24 1BN),**

**08:00: The Park Inn (North Street, York, YO1 6JF)**

**08:20: Holiday Inn Express (Malton Road, YO32 9TE)**

**Delegate not staying at one of the above hotels should meet the bus at the [Park Inn Hotel](#) at 08:00.**

### **Bus pick-up (Sand Hutton to York)**

**18:20, Wednesday 13<sup>th</sup> December:** The bus will pick up delegates at the main carpark in Sand Hutton and take delegates to York center (stopping first at the Holiday Inn, Express).

**18:20, Thursday 14<sup>th</sup> December:** The bus will pick up delegates at the main carpark in Sand Hutton and take delegates to Sandburn Hall for the conference dinner.

**22:30, Thursday 14<sup>th</sup> December:** The bus will pick up delegates at the carpark in Sandburn Hall and take delegates to York center (stopping first at the Holiday Inn, Express).

**13:15, Friday 15<sup>th</sup> December:** The bus will pick up delegates at the main carpark in Sand Hutton and take delegates to York center (stopping first at the Holiday Inn Express if required).

### **Delegate Arrival**

On arrival delegates should make their way up to the entrance barrier and give their name to the security guard on duty.

Car drivers should drive up to the entrance barrier. Our security guard will issue a car parking permit. Please display your car parking permit whilst your vehicle is left on-site.

Foot passengers should make their way to the turn style next to the entrance barrier – if you are using the bus and crossing over the A64 please use the islands on the A64 to cross over this busy road.

Taxis drop off and collect from outside the security barrier.

Delegates should make their way into the main building and make their way upstairs onto the mezzanine floor for registration and refreshments.

# Useful Information

## **WiFi**

There is free WiFi available. Delegates should connect to Sand\_Hutton\_Open WiFi. A password is not required.

## **Coats/Bags**

Coats may be stored on the coat rack which is located in the corridor adjacent to Sand Hutton Suite. Please keep bags/suitcases with you in the meeting room.

## **On-site Restaurant**

Delegates are welcome to use the on-site restaurant. A cash till is available at the front of the restaurant.

## **Workshop Dinner**

The workshop dinner will be held at Sandburn Hall <http://www.sandburnhall.co.uk/>

## **Information for presenters**

Please send your presentations to [rt@eppo.int](mailto:rt@eppo.int) ahead of the workshop in both PowerPoint and PDF format.



# The European and Mediterranean Plant Protection Organization



## What is EPPO?

EPPO is an intergovernmental organization responsible for international cooperation in plant protection in the European and Mediterranean region. In the sense of the article IX of the FAO International Plant Protection Convention (IPPC), it is the Regional Plant Protection Organization for Europe.

Founded in 1951 with 15 member governments, it now has 51 member governments including nearly every country of Western and Eastern Europe and the Mediterranean region (in green on the map).



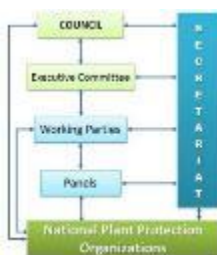
## Aims of EPPO

EPPO has two main areas of activity: plant quarantine and pest control. Its main aims are:

- To protect plant health in agriculture, forestry and the uncultivated environment.
- To develop an international strategy against the introduction and spread of pests (including invasive alien plants) that damage cultivated and wild plants, in natural and agricultural ecosystems.
- To encourage harmonization of phytosanitary regulations and all other areas of official plant protection action.
- To promote the use of modern, safe, and effective pest control methods.
- To provide a documentation service on plant protection.

## EPPO Structure

The Organization is administered by its Council (representatives of all member governments) and Executive Committee (7 governments elected on a rotational basis). A Secretariat of 14 persons is based in Paris. EPPO is financed directly by annual contributions from its member governments. Its official languages are English, French and for certain purposes Russian. The technical work is overseen by the Working Parties and Panels (experts are nominated by their National Plant Protection Organization).



EPPO Council Session

## EPPO Standards

As a result of the work being done within the different technical bodies, EPPO makes recommendations to the National Plant Protection Organizations of its member governments. These recommendations are considered as Regional Standards in the sense of the IPPC.

### Standards on plant protection products:

- Efficacy evaluation of plant protection products
- Good plant protection practice
- Environmental risk assessment of plant protection products

### Standards on phytosanitary measures:

- General phytosanitary measures
- Phytosanitary procedures
- Production of healthy plants for planting
- Pest Risk Analysis (PRA)
- Safe use of biological control
- Diagnostic protocols
- Commodity-specific phytosanitary measures
- National regulatory control systems
- Phytosanitary treatments

## EPPO information services

EPPO provides many information services to its members, most of them are freely available from the EPPO website:

[www.eppo.int](http://www.eppo.int)

### Examples of EPPO publications and databases:

- EPPO Bulletin (official journal of the Organization)
- EPPO Global Database / PQR (the EPPO database on quarantine pests)
- Pest Risk Analyses and CAPRA software
- EPPO database on diagnostic expertise
- EPPO Reporting Service (monthly newsletter)
- Datasheets on quarantine pests and pictures
- EPPO Alert List ...