

EPPO Activities on Pest Risk Analysis

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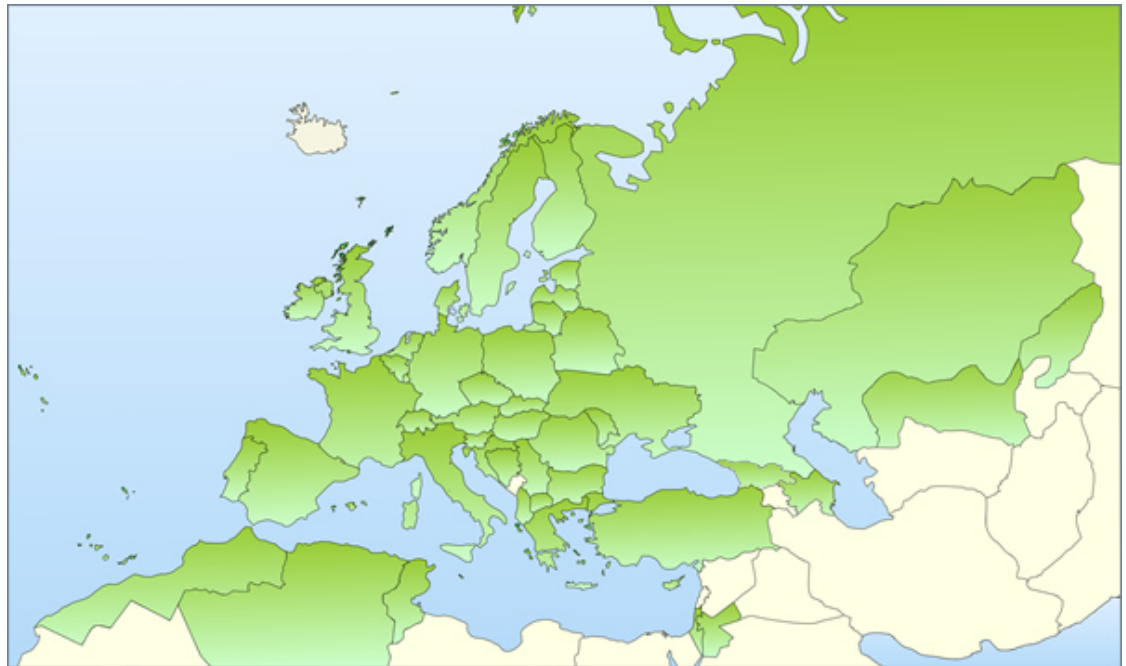


23 August 2016
Parma, Italy



European & Mediterranean Plant Protection Organization (EPPO)

- An intergovernmental organization
- Promotes cooperation in plant protection in Euro-Med area
- Created in 1951 by 15 countries
- 51 members in 2016
- www.eppo.int



Remit

- Plant quarantine
- Efficacy of plant protection products
- Invasive alien plants
- Biological control agents
- Plant certification schemes (not currently active)

by:

- Sharing information and expertise through networks
- Drafting and adoption of regional technical standards
- Input to development of international standards



Early warning, part of the EPPO strategy

- Manage an early warning system (EPPO Alert List) and maintain a database of pests
- Evaluate the risks presented by potentially invasive pests (PRA)
- Make recommendations on pests which should be regulated in Europe (standards)



EPPO Standards on PRA

- Development of EPPO Standards initiated in the 1990's
- EPPO Standards consistent with ISPMs



9th meeting of the
Panel on PRA
Israel, 2000

EPPO PRA Standards

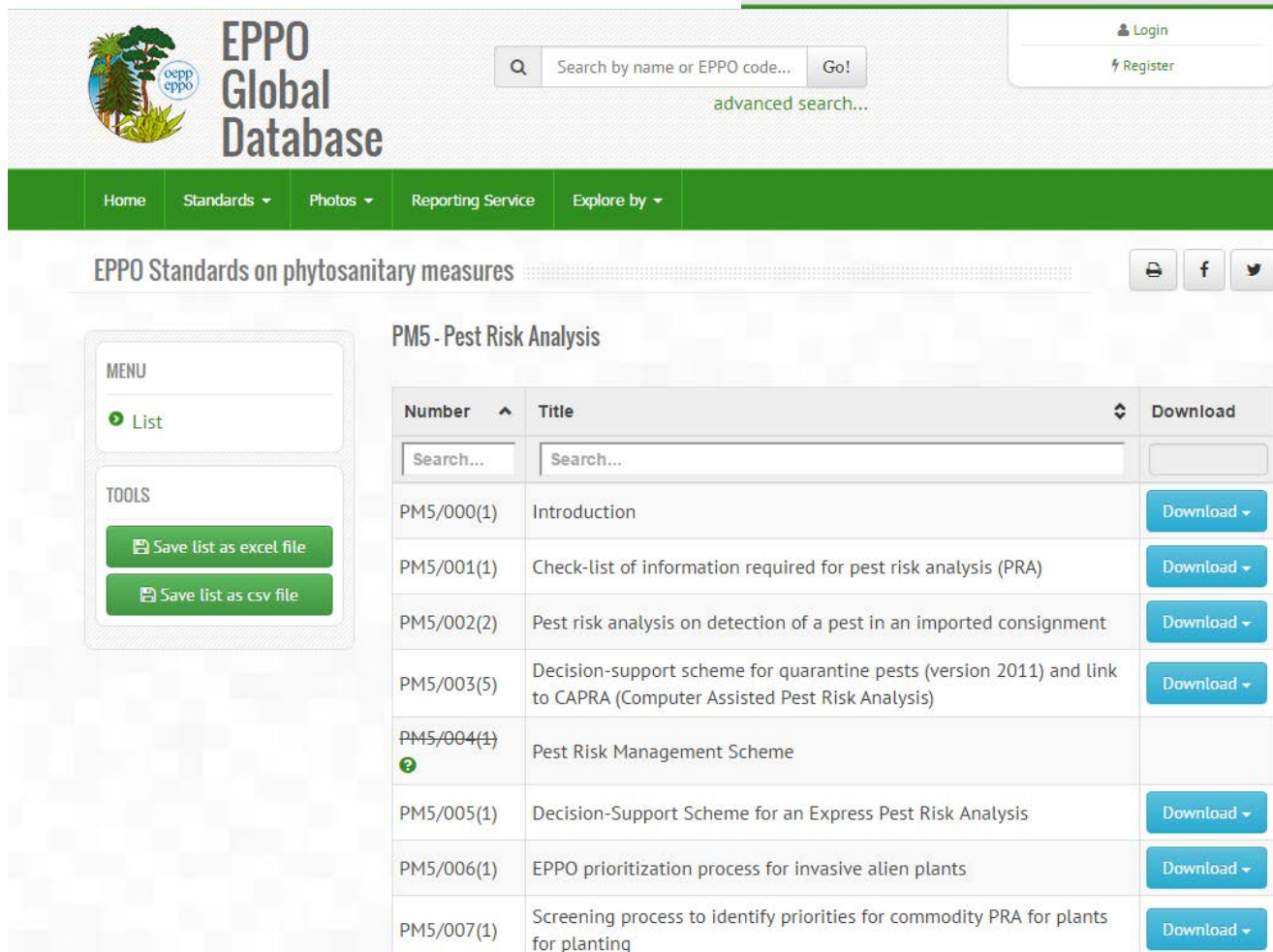
- **1992** PM 5/1 Checklist of information required for PRA
- **1992, revised in 2001** PM 5/2 PRA on detection of a pest in an imported consignment
- **1997** PM 5/3(1) Pest risk assessment scheme
- **2000** PM 5/4(1) Pest risk management scheme

Later revised and merged in the **EPPO decision support scheme for PRA**

- **2012** PM 5/5(1) Decision-Support Scheme for an Express Pest Risk Analysis
- **2012** PM 5/6 Prioritisation Process for Invasive Alien Plants
- **2013** PM 5/7 Screening Process to identify priorities for commodity PRA for plants for planting
- *(to be adopted in 2016)* Guidelines on the phytosanitary measure 'plants grown under complete physical isolation'

Standards available on Internet

<https://gd.eppo.int/standards/PM5/>



The screenshot displays the EPPO Global Database interface. At the top, there is a navigation bar with a logo on the left, a search bar in the center, and 'Login' and 'Register' buttons on the right. Below the navigation bar is a green menu bar with options: Home, Standards, Photos, Reporting Service, and Explore by. The main content area is titled 'EPPO Standards on phytosanitary measures' and includes social media icons for print, Facebook, and Twitter. On the left side, there is a 'MENU' section with a 'List' link and a 'TOOLS' section with buttons for 'Save list as excel file' and 'Save list as csv file'. The main content area features a table titled 'PM5 - Pest Risk Analysis' with columns for 'Number', 'Title', and 'Download'. The table lists various standards, including 'Introduction', 'Check-list of information required for pest risk analysis (PRA)', and 'Pest Risk Management Scheme'.

Number	Title	Download
PM5/000(1)	Introduction	Download
PM5/001(1)	Check-list of information required for pest risk analysis (PRA)	Download
PM5/002(2)	Pest risk analysis on detection of a pest in an imported consignment	Download
PM5/003(5)	Decision-support scheme for quarantine pests (version 2011) and link to CAPRA (Computer Assisted Pest Risk Analysis)	Download
PM5/004(1)	Pest Risk Management Scheme	
PM5/005(1)	Decision-Support Scheme for an Express Pest Risk Analysis	Download
PM5/006(1)	EPPO prioritization process for invasive alien plants	Download
PM5/007(1)	Screening process to identify priorities for commodity PRA for plants for planting	Download

CAPRA software

- PRA schemes available within CAPRA (developed during PRATIQUE project)
- Provides additional guidance, examples and links

The screenshot displays the CAPRA software interface, which is a web-based questionnaire for pest risk assessment. The interface is organized into several sections:

- Navigation Bar:** Located at the top, it includes buttons for "Home", "Questionnaire", "Go to sectionlist", "Save", "Show Left Menu", "Previous", "Next", "Add tagNote", "Search Answer", and "Dataset Explorer".
- Questions List:** A vertical sidebar on the left contains a list of questions, each with a green checkmark indicating completion. The questions are categorized by pest type: "Plants for planting (except seeds and ...)", "Bonsais of host plants from areas ...", and "Round wood with bark of host pl...".
- Main Content Area:** The central part of the screen displays the details of a selected question, "2.03>2.06 - Probability of the pest being associated with the individual pathway at origin." The question text includes: "Plants for planting (except seeds and bonsais) of non-fruit crops from areas where *A. germari*, *A. cinerea* or *A. japonica* occurs". Below the question text, there are radio button options for "very unlikely", "unlikely", "moderately likely", "likely", and "very likely". A "Level of uncertainty" dropdown menu is set to "high".
- Footer:** The bottom of the interface shows "CAPRA version 2.74" and a progress indicator "100%".

EPPO pest-specific PRAs

- 5 PRAs per year carried out by ad hoc Expert Working Groups (5-8 experts)
- PRAs covers arthropods, nematodes, pathogens, and invasive plants
- Selected from Alert List
- PRAs reviewed by
 - core members for consistency
 - Panels to consider risk management options
- Recommendations to member countries on which pests to regulate (A1/A2 lists)
- National PRAs may also be used to support EPPO recommendations

EPPO pathway PRAs

- Recent work on analysing risks from pathways
 - Plants for planting -> screening process
 - Tomato fruit -> recommendations for phytosanitary certificate
 - Wood chips and wood waste -> definitions and further data collection
- Development of a Standard to elaborate pest lists associated with commodities



EU-funded projects on PRA

Current projects focusing on PRA

- DROPSA
- Life IAP-Risk
- RNQP project



DROPSA



EU FP7 project (2014-2018) Strategies to develop effective, innovative and practical approaches to protect major European fruit crops from pests and pathogens (consortium of 26 partners)

- **WP 1 Pathways of introduction of fruit pests and pathogens**
 - Review of pests already introduced in the EU
 - Alert list of pests and pathogens for 4 fruit species
 - Methods for quantitative pathway risk analyses systems for fruit pests and pathogens
- **WP 8 Dissemination**

Life IAP-Risk



Mitigating the threat of invasive alien plants in the EU through pest risk analysis to support the EU Regulation (no.1143/2014)

- 2-year project (2016-2018)
- Prioritization of 16 species out of 37
- Modification of the EPPO Express PRA scheme (incl. ecosystems services, climate change)
- Performing 16 PRAs (including modelling and mapping)
- PRAs to be peer-reviewed in the usual EPPO process



**Centre for
Ecology & Hydrology**

NATURAL ENVIRONMENT RESEARCH COUNCIL

Project on Regulated Non-Quarantine Pests

- a 2-year project (2016-2018) contracted with the EU Commission
- RNQP status defined in new EU Plant Health Law
- Methodology under development (screening)
- Questionnaire to gather information from NPPOs and stakeholders
- Methodology to be applied by sector-EWGs (vegetables, ornamentals, fruit and vine, potatoes, forestry, seeds)
- Outcomes hoped to be beneficials to all EPPO countries

Communication and training on PRA

EPPO PRA available

- on EPPO website:

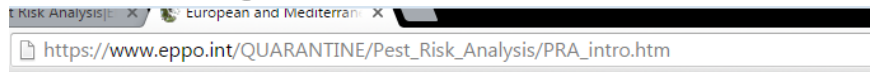
https://www.eppo.int/QUARANTINE/Pest_Risk_Analysis/PRA_intro.htm

- in EPPO Global Database

- Scoopit webpage, twitter

- Training

- Workshops
- Training sessions on EPPO scheme
- Tutors in BTSF and FAO courses



PRAs conducted by EPPO Expert Working Groups

Since 2006, EPPO organizes meetings of Experts Working Groups which are conducting PRAs on specific pests following the EPPO Decision-support scheme and its computerized version CAPRA (see above). The conclusions resulting from these PRAs are addressed to the EPPO member countries only (the area potentially at risk that is considered during these PRAs is the EPPO region, not the other parts of the world). To access PRA documents and data sheets (now stored in EPPO Global Database) click on the links.

Finalized PRAs

Pests (links to pest-specific documents in EPPO Global Database)	Final decision
Insects and mites	
Agrilus anxius	A1 - 2011
Agrilus planipennis	A1 - 2004
Apriona germari , A. japonica , A. cinerea	A1 - 2013
Aromia bungii New	A1 - 2014
Aulacaspis yasumatsui	Not added
Bactericera cockerelli	A1 - 2012
Bactrocera invadens	A1 - 2010
Diocalandra frumenti	Not added
Drosophila suzukii	A2 - 2011
Epitrix spp.	A1/A2 - 2010
Keiferia lycopersicella	A1 - 2012
Megaplatypus mutatus	A2 - 2007
Metamasius hemipterus	A1 - 2009
Neoleucinodes elegantalis New	A1 - 2014
Oeona hirta New	A1 - 2013
Polygraphus proximus New	A2 - 2014
Raoiella indica	Not added
Saperda candida	A1 - 2010
Tetranychus evansi	A2 - 2008
Thaumatotibia leucotreta	A2 - 2013
Nematodes	
Bursaphelenchus xylophilus	A1 - transferred to A2

Regional collaboration on PRA

- With EFSA
- Memorandum of collaboration
- Workshops:
 - Data collection in 2014
 - Modelling in December 2016!



and Mediterran... X

archives.eppo.int/MEETINGS/2016_conferences/efsa-epo_modelling.htm

European and Mediterranean Plant Protection Organization
Organisation Européenne et Méditerranéenne pour la Protection des Plantes

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Joint EFSA-EPPO Workshop: Modelling in Plant Health - how can models support risk assessment of plant pests and decision making?
Parma, Italy, 12-14 December 2016

- Pre-announcement and call for abstracts -

EFSA and EPPO are to hold a joint workshop in Parma on **Modelling in plant health - how can models support risk assessment of plant pests and decision-making?**

The risk assessment of plant pests is based on estimating their potential to enter the risk assessment area, to establish there, to spread and to have an impact on plants. Models on pathways, spatial distribution and potential abundance of pests in the risk assessment area can support risk assessment and the development and evaluation of management schemes. Models can also be used to estimate the impact of plant pests on crop yield and quality as well as on the environment.

The main objective of this workshop is to explore the application of models in plant health risk assessment and how risk assessment models may support decision-making in plant health.

The workshop will include presentations from keynote speakers and participants, as well as poster sessions. There will be sufficient time for discussion.

Workshop themes

- Modelling tools in plant health: principles, applications and examples
 - Quantitative pathway analysis.
 - Models for potential establishment.
 - Spread models.
 - Models for the evaluation of impacts.
 - Holistic risk assessment models.
- Framework for quantitative risk assessment
 - Databases and modelling.
 - How can modelling support quantitative risk assessment?
 - Challenges of modelling in the plant health context.
- How can modelling address the needs of risk managers and stakeholders?
 - How can models contribute to the development and evaluation of phytosanitary measures?

PRA in EPPO- What's next?

Recent survey on the use of PRA schemes in the EPPO region and the needs of risk managers

- 24 countries answered: 70% prepare PRAs or contribute to EFSA/EPPO PRAs; PRA activity expected to increase
- Need for quite short documents (5-30p to allow prompt decision; 20-70p to decide on permanent regulation)
- EPPO Standard PM 5/3 not widely used
- Need to be more flexible to focus on key questions
- Develop PM 5/5 Express scheme in CAPRA
- Guidance on commodity PRAs?
- Numerous national PRAs produced: develop a platform to share them



Any questions?

