



Work of the EPPO/IOBC Panel on Biological Control Agents

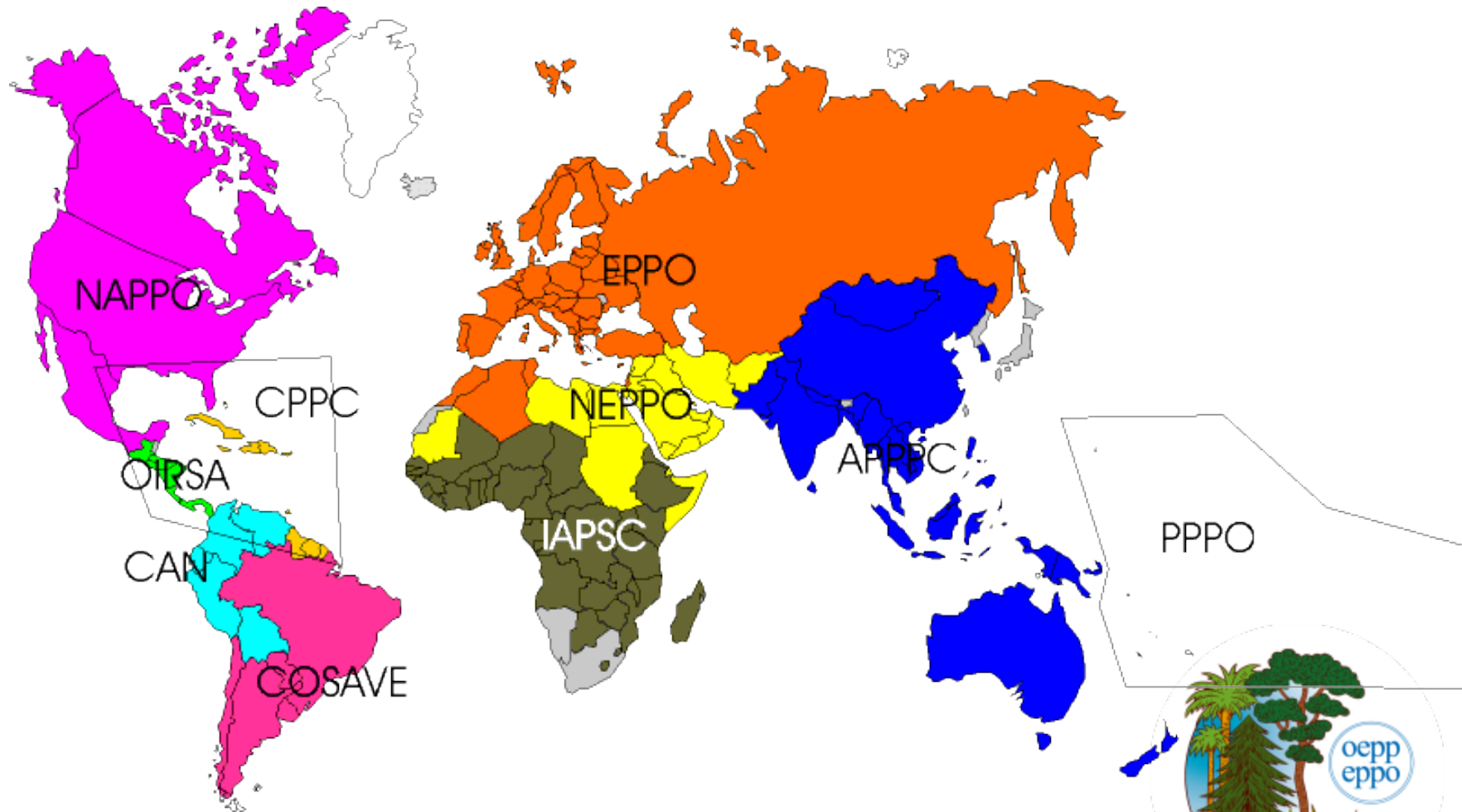
Workshop on Evaluation and Regulation of Biological Control Agents, Budapest

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Andrei ORLINSKI, EPPO – ado@eppo.int



REGIONAL PLANT PROTECTION ORGANIZATIONS



International Plant Protection Convention
Protecting the world's plant resources from pests





EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

- Regional Plant Protection Organization
- Created in 1951 by 15 countries
- Headquarters in Paris
- Main task: ensure international cooperation in plant protection



In 2015:
50,5
member
countries



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EPPO Technical bodies

Working Party on Phytosanitary Regulations

Working Party on Plant Protection Products

Panels

Phytosanitary Measures

CPM affairs

Quarantine Pests for Forestry

Phytosanitary Treatments

Bacterial Diseases

PRA development

Diagnostics and Quality Assurance

Phytosanitary Procedures

Joint EPPO/OIBC Panel on Biological Control Agents

Phytosanitary measures for potatoes

Ad hoc Panel on Nematodes

Ad hoc Panel on Invasive Alien Species

Panel on entomology

Panel on virology

Ad hoc Panel on Plant Protection Information

Panels

Efficacy Evaluation of Fungicides and Insecticides

Efficacy Evaluation of Herbicides and Growth Regulators

General Standards on Efficacy Evaluation

Ad hoc Panel on Harmonization of Data on Plant Protection Products

Resistance Panel on Plant Protection Products



EPPO/IOBC PANEL ON BIOLOGICAL CONTROL AGENTS

- EPPO/CABI Workshop on Safety and Efficacy of Biological Control in Europe (Streatley, GB, 1996)
- The idea appeared of developing “Positive lists”
- The joint EPPO/IOBC Panel on “Introduction of Exotic Biological Control Agents” was established in 1997 also involving biological control industry
- Since 2000 the Panel changed its name several times (and stayed ‘dormant from 2002 to 2008’) and became the ‘Joint EPPO/IOBC Panel on Biological Control Agents’
- Last Panel meeting: Paris 2014-10-14/16



LAST PANEL MEETING: PARIS 2014-10-14/16



EPPO/IOBC PANEL ON BIOLOGICAL CONTROL AGENTS

- The Panel at its first meeting decided to cover only invertebrate biological control agents (IBCAs) because microbiological control agents are generally covered by regulations for plant protection products
- The Panel initially focused mainly on the safety aspects of IBCAs use
- The Panel worked on the development of:
 - regulations of first import of IBCAs for research
 - regulations of import and release of non-indigenous IBCAs
 - “Positive lists”
- These were done in the format of EPPO Standards of the series PM 6 “Safe use of biological control” available on the EPPO website www.eppo.int





STANDARD PM 6/1 “FIRST IMPORT OF EXOTIC BIOLOGICAL CONTROL AGENTS FOR RESEARCH UNDER CONTAINED CONDITIONS”

- Adopted by the EPPO Council in 1999
- Intended to be used by NPPOs or equivalent authorities responsible for introduction of IBCAs
- Recognizes that introduction of some IBCAs may present certain risks
- Provides guidelines on the notification to be prepared by an organization for the import of an IBCA for research
- Provides national authorities with a guideline on safe handling of an IBCA under research to avoid risks
- Provides some general safeguards measures for import of non-indigenous IBCAs



STANDARD PM 6/2 “IMPORT AND RELEASE OF NON-INDIGENOUS BIOLOGICAL CONTROL AGENTS”

- Adopted by the EPPO Council in 2000 and revised in 2010
- Provides recommendations to EPPO countries on measures to be taken for safe import and releases of IBCAs
- Provides guidelines on the dossier to be prepared by the applicant for import and releases of IBCAs
- Provides guidelines on the evaluation of the dossier by national authorities
- Provides application forms for import, shipment, rearing and release of IBCAs with the guidelines for the completion of this form



STANDARD PM 6/3 “LIST OF BIOLOGICAL CONTROL AGENTS WIDELY USED IN THE EPPO REGION”

- First adopted by the EPPO Council in 2001
- Provides recommendations to EPPO countries on IBCAs for which simplified procedures may be applied for their import and releases
- Includes three lists (first two are the “Positive list”):
 - commercially used IBCAs,
 - successfully introduced classical IBCAs,
 - IBCAs formerly recommended by EPPO.
- Annual revisions of the “Positive list” (conducted since 2008) are not subject to approval by EPPO Council, but are decided by the joint EPPO/IOBC Panel



STANDARD PM 6/3 “LIST OF BIOLOGICAL CONTROL AGENTS WIDELY USED IN THE EPPO REGION”

- Main criteria for inclusion of an IBCA to the “Positive list”
 - 1) commercially available IBCA which is either indigenous and widespread in the EPPO region, or established and widespread in the EPPO region, or has been used for at least 5 years in at least 5 EPPO countries
 - or
 - 2) successful classical IBCA,
 - AND
 - 3) no negative non-target effects has been reported
- The 3rd list of “IBCAs formerly recommended by EPPO” is composed of species deleted from the first two lists which does not mean that EPPO recommends its countries not to use them



FURTHER ISSUES UNDER DISCUSSION

- At the last meeting of the EPPO/IOBC Panel (in 2014), further activities were discussed
 - 1) necessity to consider the efficacy of IBCAs against non-indigenous pests to convince NPPOs that the use of IBCAs could be an efficient phytosanitary measure and to promote biological control
 - 2) necessity to develop an EPPO Standard on 'Environmental Risk Assessment (ERA)' for non-indigenous IBCA introduction
- Discussions of the Panel were considered by the EPPO Working Party on Phytosanitary Regulations (WPPR) in June 2015 and the Terms of Reference of the Panel are being revised according to the decisions taken





EFFICACY OF IBCAs AGAINST NON-INDIGENOUS PESTS

- The EPPO/IOBC Panel considered that it should not focus in future only on safety aspects of IBCA use which creates a presumption that IBCAs are more dangerous than beneficial
- Most of biological control experts are working outside of the NPPO systems and therefore it is important that NPPOs consider the use of IBCAs as one of the important phytosanitary measures
- Non-indigenous pests are specifically important in new areas because of the absence of their natural enemies which suppress their populations at origin
- Therefore it is logical to introduce natural enemies from the pest origin



ONE IMPORTANT IPPC DEFINITION

Quarantine pest: a pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled





EFFICACY OF IBCAs AGAINST NON-INDIGENOUS PESTS

- Main tasks of NPPOs for a non-indigenous regulated pest are (in chronological order):
 - 1) to prevent entry
 - 2) to eradicate incursions
 - 3) to prevent spread (to contain the pest)
 - 4) to suppress pest populations to reduce economic impact to an acceptable level
 - 5) to suppress pest populations to restore environment and biodiversity damaged by the pest
- IBCAs could be successfully used at all these stages except the first one, but especially at stages 4 and 5:
 - 1) classical biological control can slow down the spread of pests, reduce economic impact to an acceptable level and restore environment and biodiversity
 - 2) augmentative biological control can help eradication and containment, and be effectively used in IPM systems in environment friendly way



ERA FOR INTRODUCTION OF NON-INDIGENOUS IBCAs

○ Background

- The EPPO/IOBC Panel raised several times the question of necessity to create an international “First Release Expert Group (FREG)” which could be able to evaluate dossiers/applications for import and release of non-indigenous IBCAs in the EPPO region, but the EPPO Working Party for Phytosanitary Regulations did not accept for several reasons that this role could be played by EPPO

- For the assessment of potential risks from the IBCAs introductions, it had been recommended to use Pest Risk Analysis (PRA) schemes, but the EPPO/IOBC Panel believed that PRA is not appropriate for IBCAs assessment for several reasons

- The EPPO/IOBC Panel decided that a specific scheme should be developed for IBCAs assessment as a tool for EPPO countries in the absence of FREG



ERA FOR INTRODUCTION OF NON-INDIGENOUS IBCAs

- A draft ERA scheme was developed by the EPPO Secretariat and presented to the last meeting of the EPPO/IOBC Panel
- A lot of questions were raised at the meeting:
 - should the ERA be comparative: comparing possible risks of negative non-target environmental effects with (1) potential positive environmental effects due to reducing pest populations and (2) with negative environmental effects of alternative control options which would be applied in the absence of IBCAs?
 - should the assessment of potential negative & positive effects be included in the same scheme and should they be assessed by the same experts?
 - should classical and commercial IBCAs be evaluated in the same way?
 - should natural enemies of weeds and of invertebrate pests be evaluated following the same scheme?



PEST RISK ANALYSIS





P **RISK ANALYSIS**





~~Plant~~ RISK ANALYSIS



ERA FOR INTRODUCTION OF NON-INDIGENOUS IBCAs

- The WPPR approved the specification for the development of the EPPO Standard: ‘Decision-support scheme for import and release of non-indigenous invertebrate biological control agents of plant pests’
- The scheme should be comparative and universal (for assessment of both classical and commercial IBCAs, natural enemies of weeds and of invertebrate pests)
- The revision of the scheme was prepared by the EPPO Secretariat for discussion and testing by the EPPO/IOBC Panel





~~Plant~~ RISK ANALYSIS





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WARNING! INVASIVE PLANTS!

DO NOT PARK YOUR CAR FOR TOO LONG!



Thank you for your attention