EEC/EPPO Workshop 2018-06-6/8

Regulated pests: risk analysis and listing

Event: IPPC Regional Workshop
Bykovo, Moscow
Date: 2018-09-3/6

Martin Ward (Director General) - hq@eppo.int

2018-06-06/08

- About 55 participants from 16 Countries (6EU + 5 EAEU + 5 other EPPO countries);
- EEC / EC / EFSA / FAO / ESA / EPPO

Programme

SESSION 1: Pest Risk Analysis (PRA) for Quarantine Pests	
1. Pest Risk Analysis;	Mr Orlinski (OEPP)
2. Recent EPPO activities on PRA;	Mr Ward (OEPP)
3. Activities of the EAEU countries on PRA for Quarantine Pests;	Ms Mironova (VNIIKR, RU)
4. Activities of the EFSA on categorizations and PRAs ;	Ms Kertesz (EFSA) by videoconference
5. Pest risk analysis for possible introduction and spread of quarantine and regulated non-quarantine pests in the Russian Federation ;	Mr Shesteperov (RU)
6. Pest risk analysis for the spread of late blight root rot of raspberries and strawberries in Russia ;	Mr Golovin (RU)
7. Globodera rostochiensis in Kyrgyzstan;	Mr Isaev (KGZ)
8. Spider mites in Russia.	Mr Popov (RU)

Programme

SESSION 2: Assessment of the RNQP status	
1. The RNQP Project;	Mr Ward (EPPO)
2. Methodology for the evaluation of the RNQP status ;	Mr Picard (EPPO)
3. Examples of evaluations performed during the Project: 3.1 Blackleg disease on seed potatoes;	Ms Kortemaa (EVIRA, FI)
3.2 Clavibacter michiganensis subsp. michiganensis on tomato and pepper for the vegetable sector;	Ms Levi (PPIS, IL)
4. Outcome of the RNQP Project and recommendations for the EPPO region ;	Mr Picard (EPPO)
5. National experience in the evaluation of RNQPs: 5.1. Bacterial ring rot on potato - Clavibacter michiganensis subsp. sepedonicus as a candidate for the RNQP List;	Ms Yerchyk (BLR)
5.2 Study of the prevalence and severity of viral diseases in raspberries in the Russian Federation;	Mr Upadyshev (RU)
5.3 Ustilago tritici;	Ms Moldybaeva (KZ)

Programme

SESSION 3: Procedure for developing new lists of regulated pests	
1. EPPO process to recommend the listing of new pests	Mr Ward (EPPO)
2. National experience in Switzerland	Ms Pluess (CH)
3.‘Common Quarantine Phytosanitary Requirements of the Eurasian Economic Union’	Mr Strelkov (EEC)
4. New status for quarantine pests, priority pests and RNQPs under the new EU Plant Health Regulation	Mr Arijs (EC)

Working Session

- During the afternoon of the second day, participants were split in 3 working groups with translators. Each group assessed the RNQP status of one or two pest/host/intended use combinations
  - Group 1 - *Tilletia tritici* on wheat seeds for the cereal sector and the parasitic plant *Cuscuta*.
  - Group 2 -*Raspberry leaf blotch virus* (RLBV) on raspberry plants for the fruit sector and the parasitic plant *Cuscuta*
  - Group 3 -*Dryocosmus kuriphilus* on chestnut plants for the fruit and forestry sectors, and *Tilletia tritici* on wheat seeds for the cereal sector

Regulated Non Quarantine Pests for the EU

- Pests present in an area, regulated on plants for planting (including seeds), to reduce economic impact on producer
- Two year project carried out by EPPO, funded by the EU
- Covered taxonomy, evaluation against RNQP criteria, risk management measures (RMM) and tolerance levels
- Methodology developed by Expert Working Group
- Used on 1400 pest/host combinations in Sector EWGs
  - pests listed in EU Marketing Directives
  - pests from Annex IIA2 of EU Directive 2000/29
- Experts from 16 EU and 5 non-EU countries involved
- Final report and recommendations published soon

A – PM4 (qualification question)

PM4

A1 – Is the pest already listed in a PM4 standard on the concerned host plant? [by EPPO]

Yes: Recommended for the RNQP status – based on PM4

No

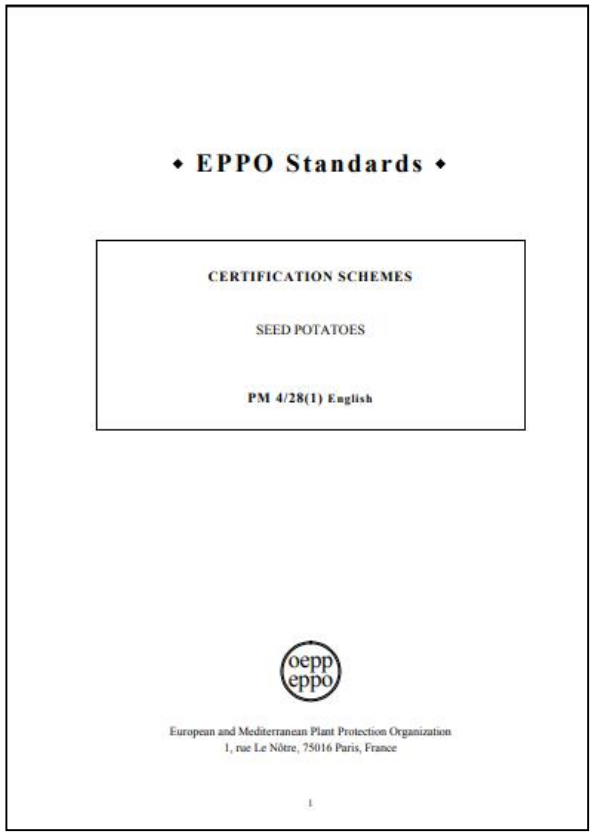
Continue

Justification: through a peer reviewed process there was an agreement at EPPO level that this pest was relevant for certification.

Remark: Categorisations may be reviewed by the SEWG and further evaluation is not excluded (e.g. when pests are transmitted by vectors).

Ex: *Rhizoctonia solani* (Black scurf) on **seed potatoes**

Photo from https://www.unece.org



◆ EPPO Standards ◆

CERTIFICATION SCHEMES

SEED POTATOES

PM 4/28(1) English

oepp eppo

European and Mediterranean Plant Protection Organization
1, rue Le Nôtre, 75016 Paris, France

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B – Taxonomy (elimination questions)

TAXONOMY

B1 - Is the organism clearly a single taxonomic entity and can it be adequately distinguished from other entities of the same rank? [by EPPO]

No → ✗

Yes → **B2 -** Is the pest defined at the species level or lower*? [by EPPO]

No → ✗

Yes → **B4 -** Is it justified that the pest is listed at a taxonomic rank below* species level? [by SEWGs]

Yes → **B3 -** Can listing of the pest at a taxonomic level higher** than species be supported by scientific reasons or can species be identified within the taxonomic rank which are the (main) pests of concern *(If Yes, please list the species)* ? [by EPPO, using Q.]

No → ✗

Yes → **Continue**

No → ✗

Remark: According to ISPM21, the **'identity of the pest'** and the **'taxonomic listing of hosts'** should be generally the species level. The use of a higher or lower taxonomic level should be supported by a scientifically sound rationale (for hosts, this was checked directly by SEWGs).

Ex: Blackleg disease on seed potatoes and the listing of ***Dickeya*** and ***Pectobacterium*** at the genus level

Photo from https://www.unece.org

C – Status in the EU (elimination questions)

STATUS IN EU

C1 - Is this pest already a quarantine pest for whole EU? [by EPPO]

Yes → ✗

No ↓

C2 - Is this pest present in the EU? [by EPPO]

No → ✗

Yes ↓

Continue

Remark (C1): ”quarantine pest for the whole EU” are considered those pests which are currently listed in **Annex I** and **Annex II** of Council Directive 2000/29/EC and in Commission emergency measures, apart from those proposed as RNQPs by the IIA2AWG.

-> Replace ‘EU’ by ‘area’ when used in another context

Remark (C2): For pest for which there is uncertainty concerning the presence in the EU, the answer to the question should be yes.

Ex: *Burkholderia caryophylli* on *Dianthus* plants (carnation)

Uncertainties about the presence in the EU and EPPO region linked to the application of efficient national voluntary certification schemes.

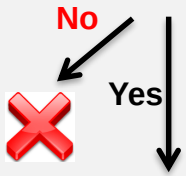
D – Pathways (elimination question)

PATHWAYS

D1 - Are the listed plants for planting the main pathway for the pest/host/intended use combination?

(to evaluate if it is the "main" pathway, we evaluate if plants for planting is a significant pathway compared to other pathways)

[by EPPO + SEWGs]



Continue

- *Justify that the plant species is a host, that the pest can be transported on the part of the plant that constitutes the plant for planting;*
- *List the other possible pathways;*
- *Give an assessment of the relative contribution of the pathways.*

Note:
The relative importance of plants for planting as a pathway should only be considered in relation to areas where the pest is present, not for movement into areas which are free from the pest.

Ex: *Paysandisia archon* on **Palm trees**

Plants for planting are not the main pathway in areas where the pest is present because of the natural dispersal capacity:
The pest is a strong flier: daily flight distance of minimum 6 m, mean 310 m and maximum 3 km (EFSA-PLH, 2014).

https://gd.eppo.int/taxon/PAYSAR/photos

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[by EPPO + SEWGs]

No

Yes

Continue

Control measures or cultural practices can reduce the contribution of pathways other than plant for planting.

Ex: *Giberella fujikuroi* on ***Oryza sativa*** *seeds*

In case of a rotation with wheat (e.g. Camargue, France) or alfalfa, rice seeds can be considered as a significant pathway compared to other pathways.
In absence of rotation, or in case of rotation with highly sensitive crops, main source of contamination will come from the soil.
Rice seeds are considered to be a significant pathway compared to other pathways.

Photo: https://www.cropscience.bayer.com/en/crop-compendium/pests-diseases-weeds/diseases/gibberella-fujikuroi

E – Economic impact (elimination questions)

ECONOMIC IMPACT

E1 - Are there documented reports of any economic impact on the host? [by EPPO, using Q.]

No

Yes

E2 - What is the likely economic impact of the pest irrespective of its infestation source in the absence of phytosanitary measures (= official measures)? [by SEWGs]

Minimal, Minor, Medium, Major, Massive

E3 - Is the economic impact due to the presence of the pest on the named host plant for planting, acceptable to the propagation and end user sectors concerned? [by SEWGs, using Q.]

Yes

No

E4 - Is there unacceptable economic impact caused to other hosts (or the same host with a different intended use) produced at the same place of production due to the transfer of the pest from the named host plant for planting ? [by SEWGs]

Continue

No

Yes

Continue

Note: Impacts of vectors pathogens combinations may need to be considered as well as direct impacts.

Remark (E2): Five level scale adapted from EPPO PM 5/3

Ex (E4): *Citrus exocortis viroid* on tomato plants: economic impact on tomato, due to the transfer of **CEVd** from aubergine, even though it has no impact on aubergine;

Ex (E4): '*Candidatus* Phytoplasma mali' on **ornamental *Malus*:** economic impact on apple trees for fruit production, due to the transfer of **'*Ca.* P. mali'** from **ornamental** apple trees, even the impact is acceptable on ornamentals.

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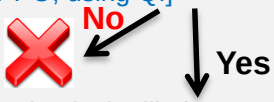

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Continue

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Continue

Remark: Since RNQPs are present in the area, detailed first-hand information should be available.

However, RNQPs may already be subject to a certification scheme which may limit any unacceptable economic impact being observed.

F – Risk management measures (elimination question)

RMM

F1 - Are there feasible and effective measures available to prevent the presence of the pest on the plants for planting at an incidence above a certain threshold (including zero) to avoid an unacceptable economic impact as regards the relevant host plants? [by SEWGs]

No

Yes

Continue

Effective measures available to be listed.

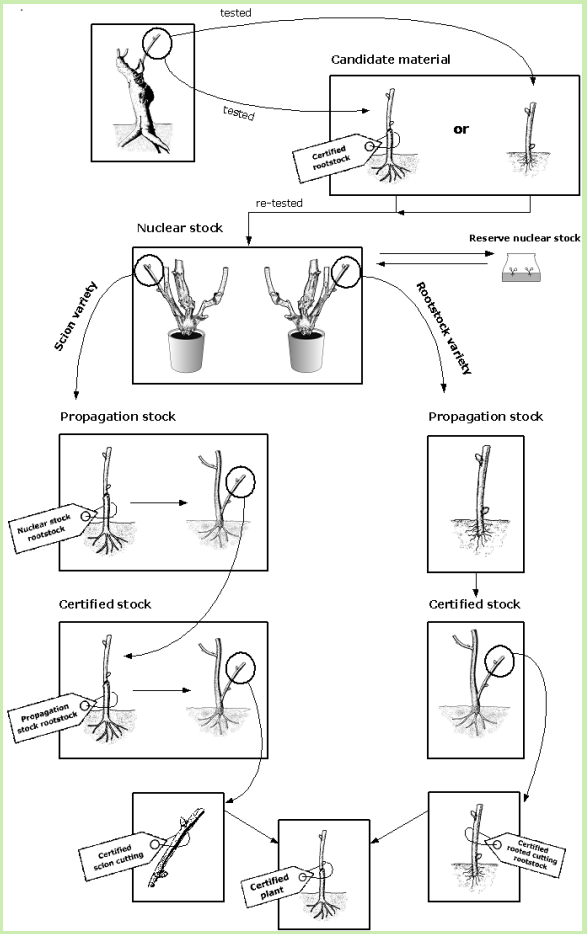

Photo: C. Picard

G – Data quality

DATA QUALITY

G1 - Is the quality of the data sufficient to recommend the pest to be listed as a RNQP?? [by SEWGs]

↗ **Yes: Recommended for the RNQP status – based on data**

↘ **No: Recommended for the RNQP status – by default**

Remark: In case of uncertainties due to a lack of data, the pest was recommended "by default" for the RNQP status *[because pest/host combinations analysed were already regulated]*.

PM4

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TAXONOMY

B1 - Is the organism clearly a single taxonomic entity and can it be adequately distinguished from other entities of the same rank? [by EPPO]

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Yes → **B3 -** Can listing of the pest at a taxonomic level higher** than species be supported by scientific reasons or can species be identified within the taxonomic rank which are the (main) pests of concern *(If Yes, please list the species)* ? [by EPPO, using Q.]

No → ✗ | Yes → **Continue**

No → ✗

STATUS IN EU

C1 - Is this pest already a quarantine pest for whole EU? [by EPPO]

Yes → ✗ | No → **C2 -** Is this pest present in the EU? [by EPPO]

No → ✗ | Yes → **Continue**

PATHWAYS

D1 - Are the listed plants for planting the main pathway for the pest/host/intended use combination?

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[by EPPO + SEWGs]

No → ✗ | Yes → **Continue**

ECONOMIC IMPACT

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Yes → **Continue** | No → **E4** - Is there unacceptable economic impact caused to other hosts (or the same host with a different intended use) produced at the same place of production due to the transfer of the pest from the named host plant for planting ? [by SEWGs]

No → ✗ | Yes → **Continue**

RMM

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No → ✗ | Yes → **Continue**

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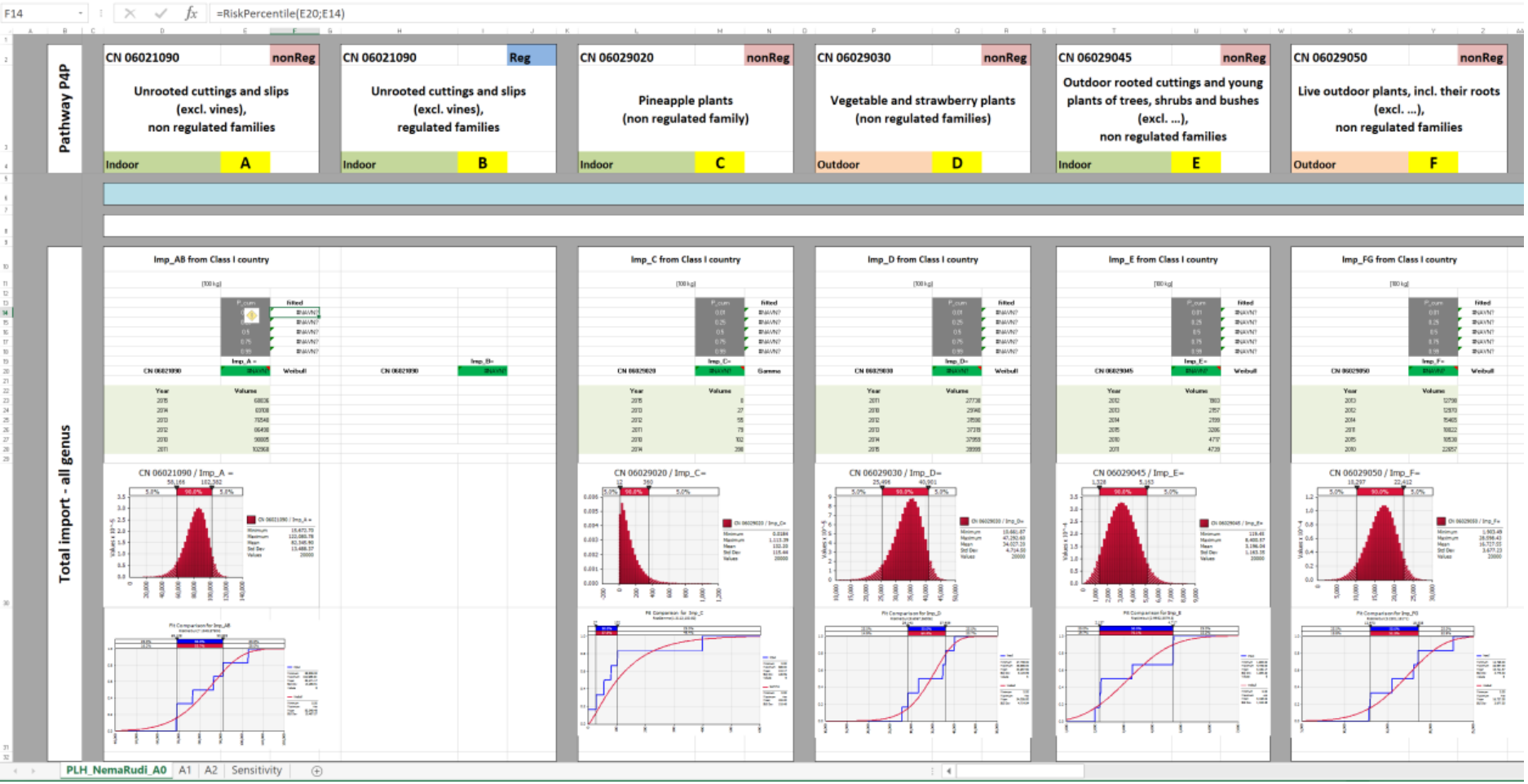
Quantitative approaches to PRA by EFSA
Quantitative outputs require time, money and data - may be worthwhile in some cases



Workshop conclusions

- Workshop useful, the topic discussed was timely;
- Importance of sharing information;

In particular for RNQP evaluation:

- Helpful to realise that RNQP concept needs a different way of thinking;
- Methodology worked & can be applied by experts even with limited experience;
- Translation in RU (methodology + article), after being adapted to the EPPO region;
- More guidance needed (e.g. pathway, development of RMMs, examples);
- Secretariat should consider how the methodology is added to CAPRA;
- Experience to be shared with other regions of the world;

In particular for RNQP listing:

- Countries from EAEU may go towards a unified list of RNQPs;
- Recommendations from the RNQP project could give a common ground within EU and EAEU;

Lessons for future

- EEC/EC/EPPO workshop good for contacts across the region
- Slides to be in both languages (EN + RU) if possible
- RNQP methodology to be considered for translation

Feedback on the workshop exercise would be useful – including how to improve training materials etc.