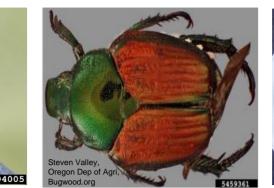
EFSA develops scientifically based survey guidelines for EU Member States

G Schrader*, J Cortiñas Abrahantes, M Diakaki, M Schenk, S Vos, G Zancanaro

















Federal Research Centre for Cultivated Plants

Julius Kühn-Institut



European Food Safety Authority



Nederlandse Voedsel- en Warenautoriteit Ministerie van Economische Zaken, Landbouw en Innovatie

EFSA Grant GP/EFSA/ALPHA/2017/02

Types of surveys

Detection survey

Early detection of pests

Changes in pest status

declarations of pest

Support NPPO

freedom

their planning and execution of their survey activities by providing practical and concise outputs

- addressing all pests of the survey work program 2018-2020
- providing detailed guidelines for surveillance for 3 pilot organisms

EFSA was requested (article 31 of Regulation (EC) No 178/2002) by the

Commission of the European Union (EU) to facilitate EU Member States in

Outputs (already available: https://bit.ly/2Yg5cmh)

- 1. Workplan and methods for EFSA to develop plant pest survey guidelines for EU Member States (March 2018, EFSA Journal).
- 2. "Pest survey cards" with all necessary information for scientifically and technically based surveys. Already available: 7 Citrus cards for 12 pests, 8 Potato cards for 13 pests, 2 Miscellaneous card for 2 pest. In preparation: 12 cards for 13 forest pests, 15 cards for 15 miscellaneous pests.
- 3. General and specific guidelines, pest survey cards for three pilot pests: Agrilus planipennis, Phyllosticta citricarpa and Xylella fastidiosa. Already available: pest survey card for Xylella fastidiosa.

Key questions

no Is the pest known to occur in the (Pest free survey area? area)

Is the pest widespread in that area?

yes

yes

(Infested following an outbreak

> Tailor pest management Define low prevalence area (ISPM 22)

Statistical tools

RiBESS+ tool

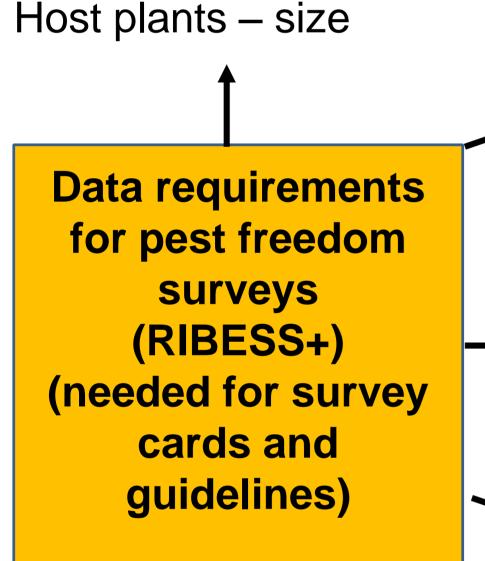
Delimiting survey (Zoning) Delimit the extent of a pest

> Monitoring survey

Pest prevalence estimation SAMPELATOR tool

Pest freedom

Target population:



Epidemiological unit:

Homogeneous spatial units

Risk based approach:

Relative risk and optimal targeting

Detection and diagnostic method:

Visual examination and laboratory tests – methods sensitivity

Design prevalence and confidence:

Confidence around the estimation of the real prevalence or of the freedom statement. E.g. if all examinations and/or tests are negative, the Member State is 95% confident that, if the pest is present, its prevalence is below 1% in the target population (using RIBESS+ and choosing these values beforehand)

Relevant International Standards on Phytosanitary Measures (ISPMs)

ISPM 4: Requirements for the establishment of pest free areas

ISPM 6: Surveillance

ISPM 8: Determination of pest status in an area

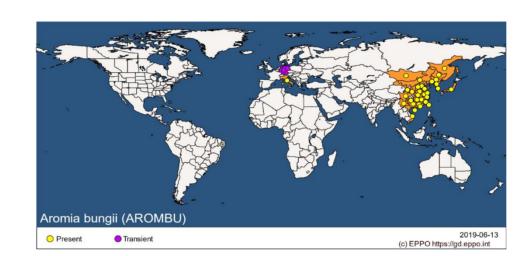
ISPM 9: Guidelines for pest eradication programmes

ISPM 27: Diagnostic protocols for regulated pests

ISPM 31: Methodologies for sampling of consignments

Conclusions and further steps

- The design for detection and delimiting surveys on a statistically sound base, choices for data have to be made by Member States for their specific situation
- General and specific guidelines for survey design will be available by spring 2020
- Specific guidelines will be provided in separate documents and describe step by step the process of the survey design for the three pilot pests
- A manual for guiding the user through the EFSA open-access statistical tools (RIBESS+, Sampelator) will be provided





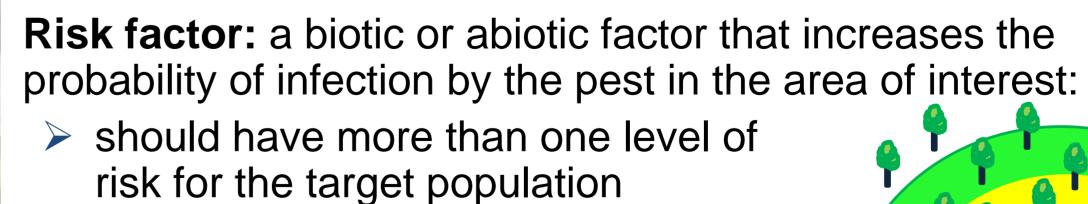




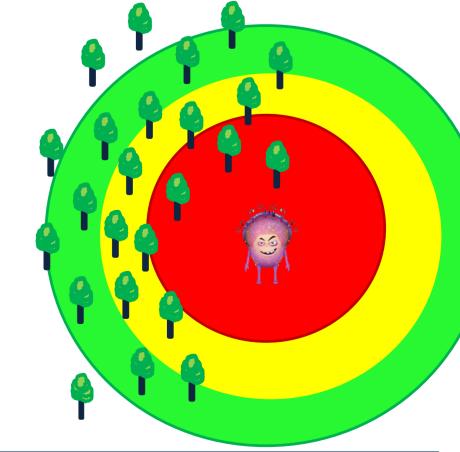
Content of survey cards:

- 1.The pest and its biology
- Taxonomy, regulatory status, distribution
- Life cycle, host plants, environmental suitability
- Spread capacity
- Risk factors
- 2. Detection and identification methods
- Visual examination (Pest, Symptoms, Traps)
- Laboratory testing (Identification of methods, Diagnostic protocols)
- 3. Key elements for survey design
- Target population
- Epidemiological unit
- ➢ Inspection units

ISPM 9: Surveys should be designed and executed to provide the level of statistical confidence necessary for the results to be meaningful for regulatory purposes



- characterised by the relative risk and the proportion of the overall plant population on which it applies
- the relative risk of each level needs to be estimated as the relative probability of infection compared to a baseline with a level 1



- Examples provided in the pest survey cards for:
- risk activities
- risk locations
- risk areas



