91ST ADVISORY FORUM
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ESTIMATION OF PLANT PEST SURVEY PARAMETERS

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PLANTS Unit –ASSESS Department

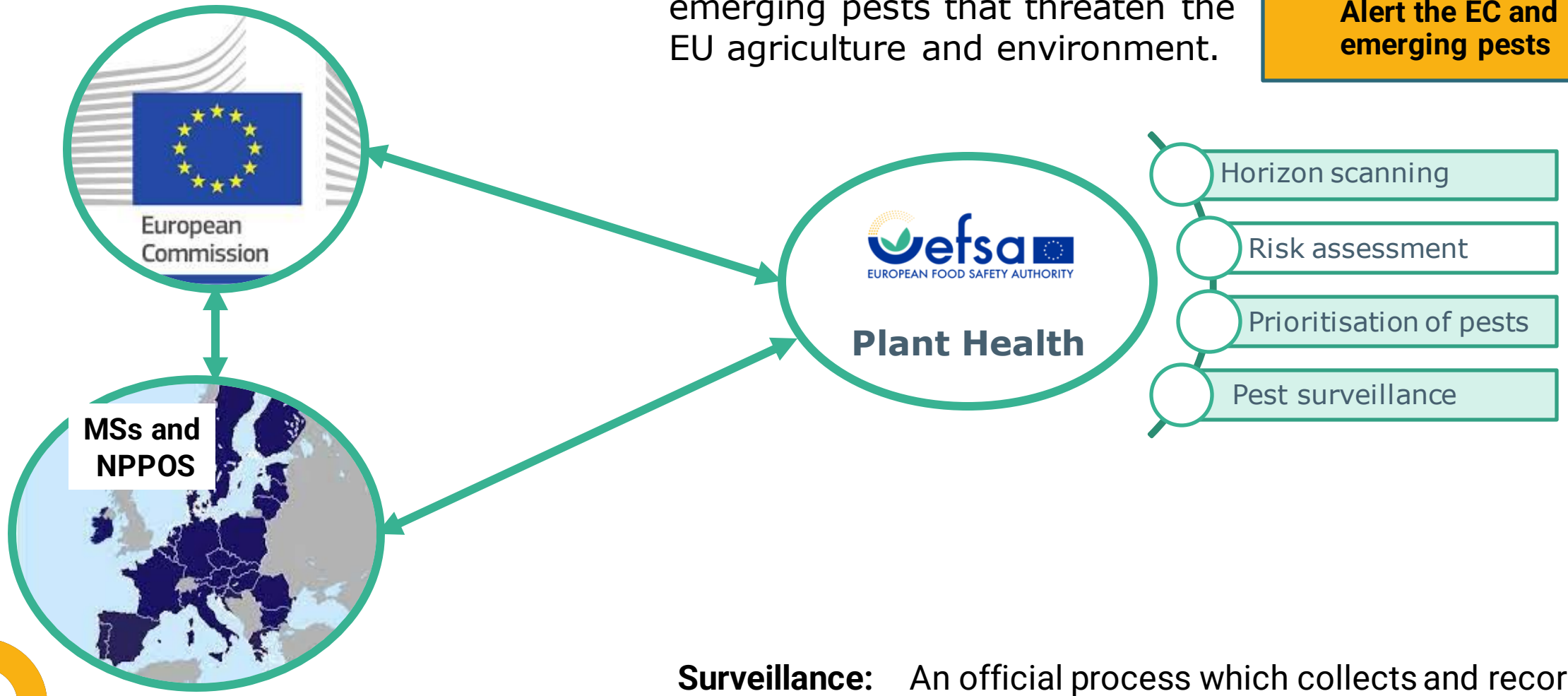
EUROPEAN FOOD SAFETY AUTHORITY

EFSA PLANT HEALTH

We provide scientific advice communication on existing and emerging pests that threaten the EU agriculture and environment.

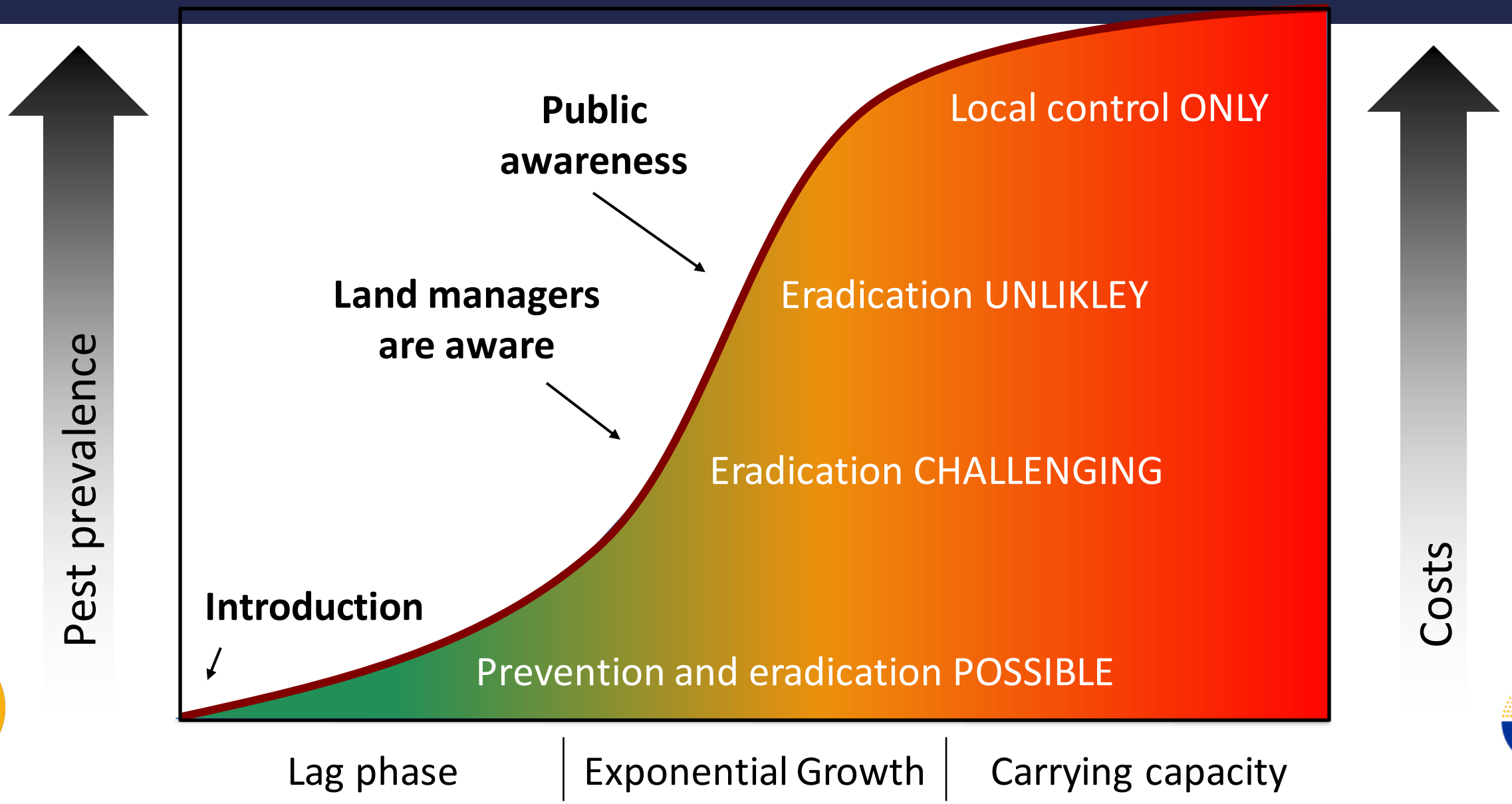
Facilitate systems for the timely detection of UQP

Alert the EC and MSs for emerging pests



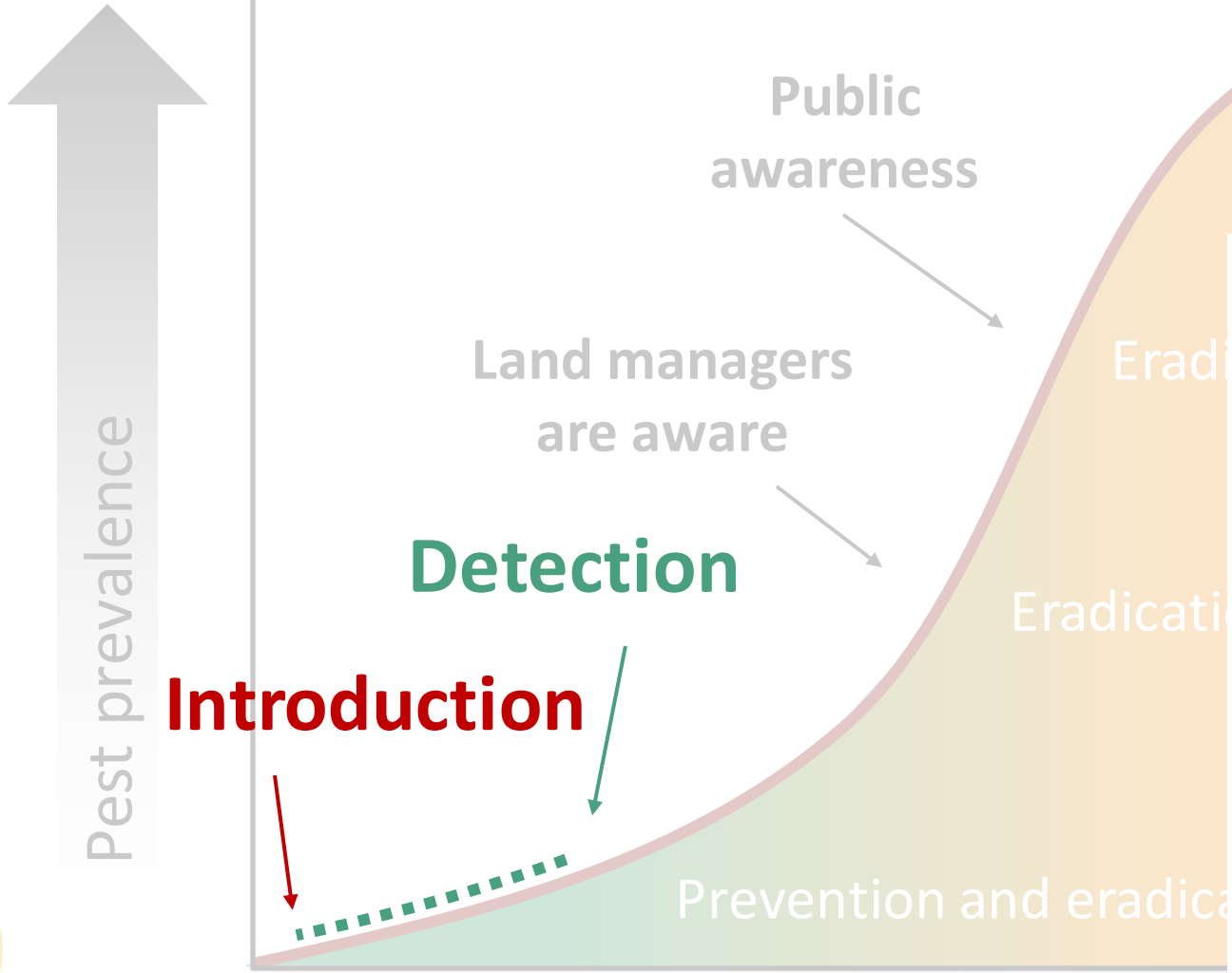
Surveillance: An official process which collects and records data on pest presence or absence by survey, monitoring or other procedures (ISPM 5 – IPPC – FAO)

INVASION CURVE

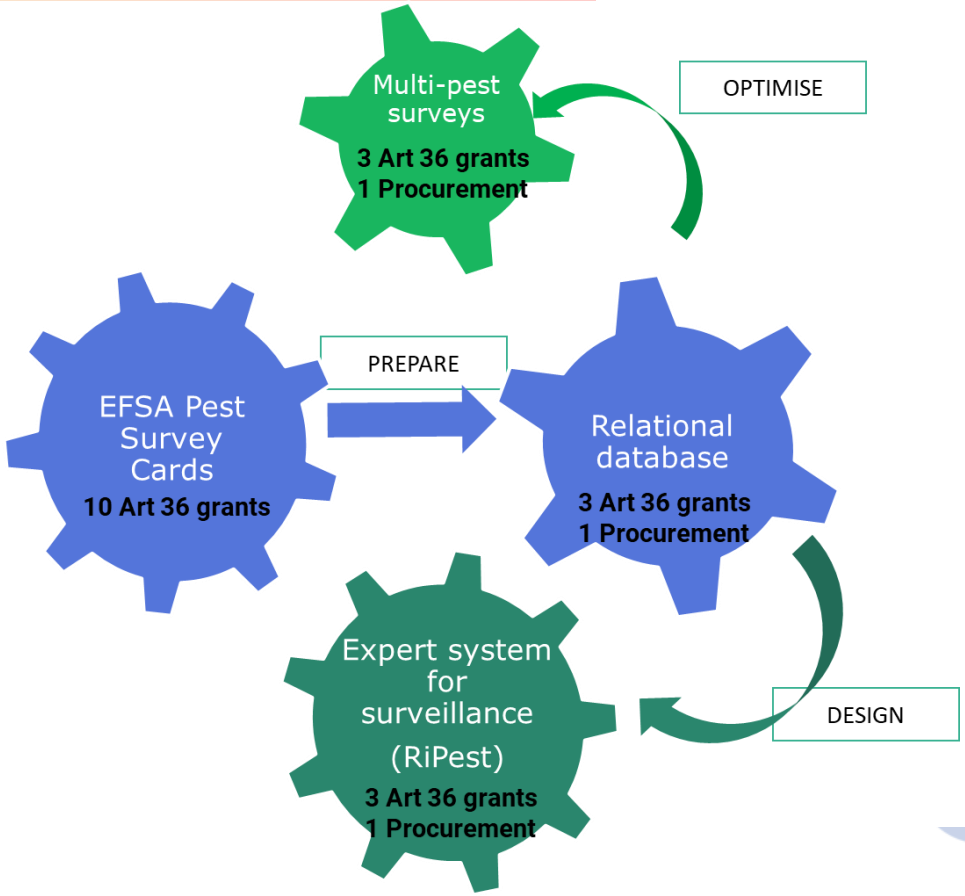


From: California Department of Fish and Wildlife (wildlife.ca.gov)

MAJOR CHALLENGE



Surveillance toolkit



METHODOLOGICAL FRAMEWORK & TOOLKIT

Impossible to inspect all host plant

Statistics and science

We need a sample

METHODOLOGICAL FRAMEWORK & SURVEY PARAMETERS

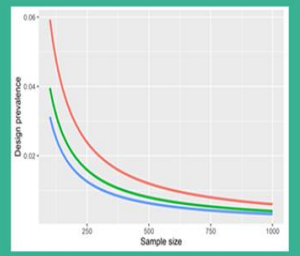
Impossible to inspect all host plant

Statistics and science

We need a sample

WHAT ? Characterise the PEST

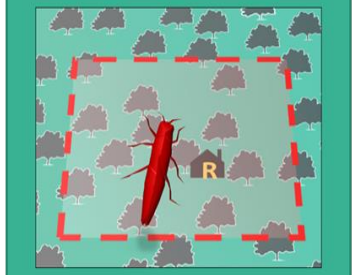
Design prevalence



The minimum **pest prevalence** that a **survey** will detect with a given **confidence level**.

WHERE ? Characterise the host plants

Relative risk



An area associated with an elevated risk compared to a baseline area

HOW? WHEN? Detection methods

Method Sensitivity

The probability to correctly identify a positive inspection unit as positive

Estimates and data gaps

How much ? Sample

EFSA PLANT HEALTH

Pest survey toolkit

Partnerships = Be fit for purpose

Networking / Sharing / Training / Partner

2 PLH Networks

- Risk assessment in PLH
- **Plant pest surveillance**

EFSA NETWORKS / Art36 Grants /SNEs

Efforts for increasing partnership:

- MS contact points
- Capacity building
- Diversity and number of grant holders
- Promotion of grants
- Simplification of grant procedures

e.g. Ongoing Grants

NVWA NL
CNR IT
UPAD IT
CREA IT
IVIA ES
CSIC ES
ILVO BE
HAPIH HR
Thessaly Univ GR

e.g. ongoing procurements

Openanalytics
4 ISA experts

ESTIMATION OF SURVEY PARAMETERS **FOR 20 PRIORITY PESTS**

PP: 20 UQP ranked highest for the threat they pose to EU agriculture and environment

Collect the evidence available

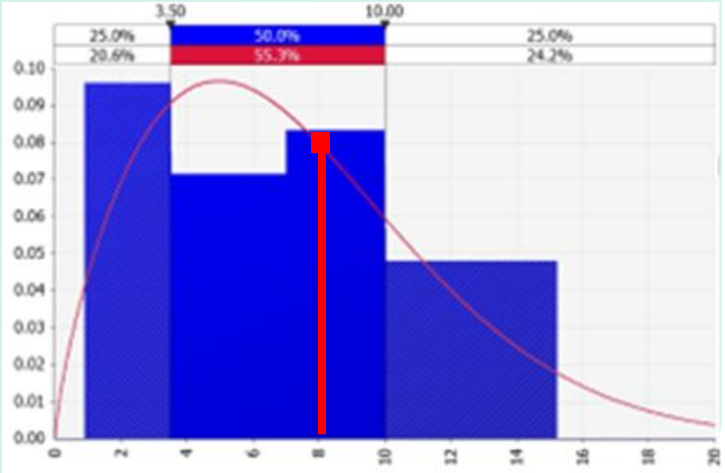
GP/EFSA/PLANTS/2022/09 - Lot 2.

Collection of evidence in preparation of expert knowledge elicitation on method sensitivity and design prevalence

Thessaly University

EKE: EU median for the survey parameters.

- defined scenario
- uncertainties
- Guide



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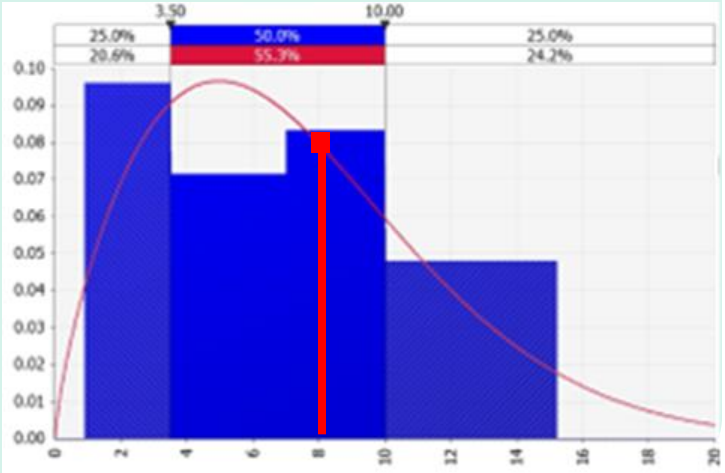

Design standardized experimental and statistical protocols

Art 36 Grant April-May
250,000€ and 24 Months

Setting the parameters at local/national level

- Data collection and analyses:
- Pilots for implementing the protocols

Opportunity for
New partnership

GRANTS IN PEST SURVEILLANCE

Other Opportunities

for new partnerships
in 2025

Pest survey cards for UQP pests

- Pests of cereals and fibre crops
- Begomoviruses and Bemisia tabacci
- Non-EU Scolytinae (?)
- Other pests

Effectiveness of insect trapping methods

- Develop a method (Color-Bait-Design)
- Pheromones and kairomones
- Coverage and attractiveness of traps
- Recommended traps for EU Priority pests

CONCLUSIONS

Main challenges in pest surveillance

- Early detection of pests
  → eradication and control is costly
- Harmonised Pest status
  → Robust surveys comparable in time and space
- Training
  →Use of New tools and workload of MS

Opportunities for Cooperation

SNEs and Art 36 organisation

- get trained - **capacity building**
- fit for purpose support

Annual workshops

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