

EFSA Pest Survey toolkit

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Plant Health Monitoring Team

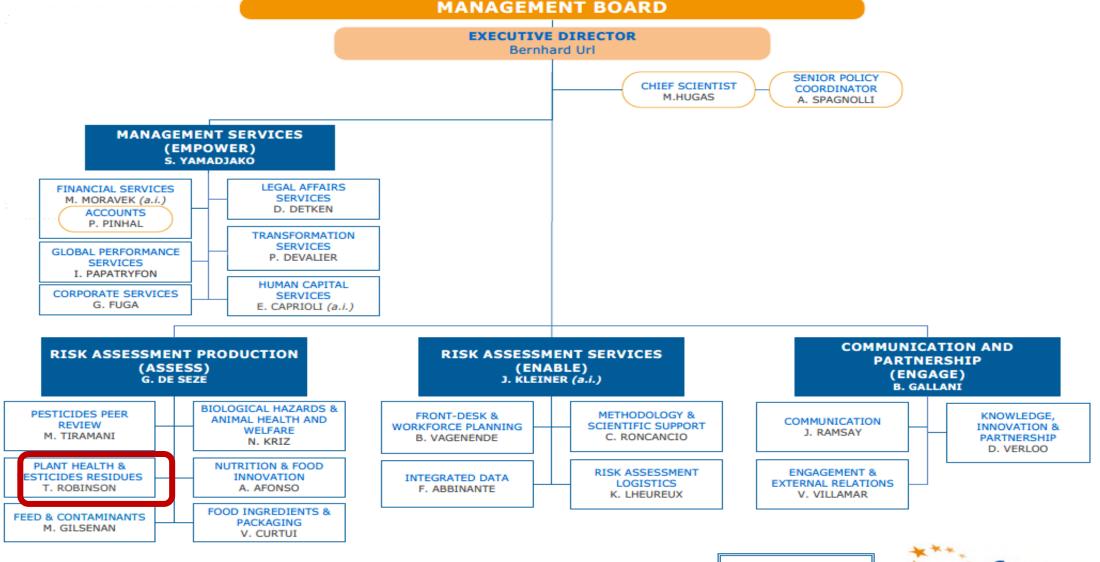
Plant Health and Pesticide Residues Unit (PLANTS)



New EFSA organisational structure



European Food Safety Authority

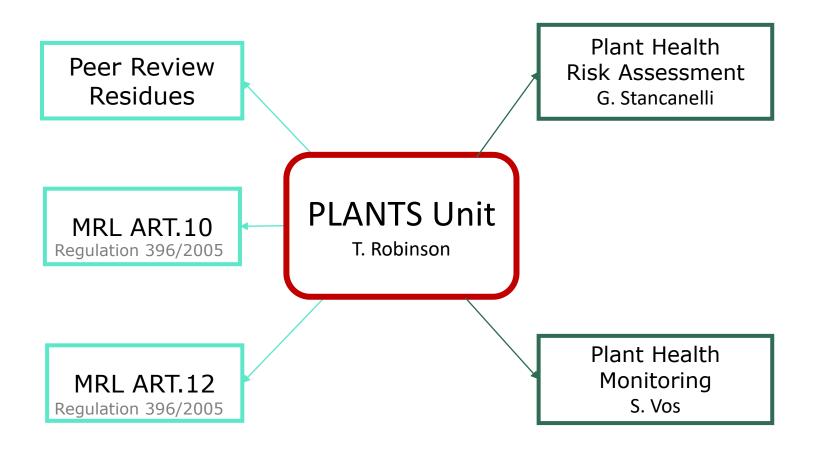


Department

Unit

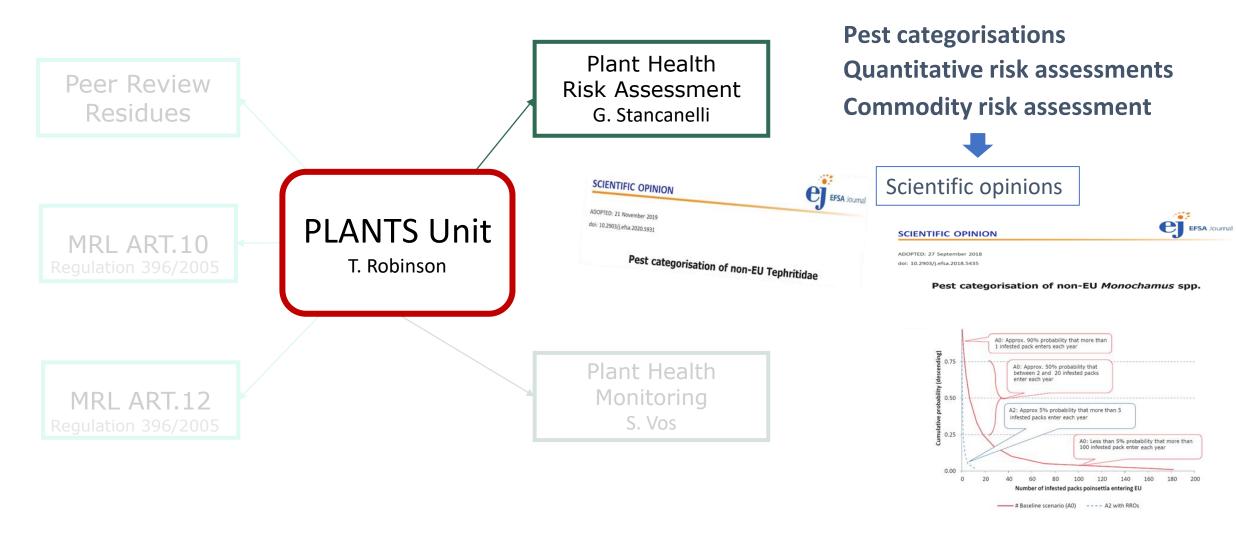
Plant Health and Pesticide Residues Unit (PLANTS)





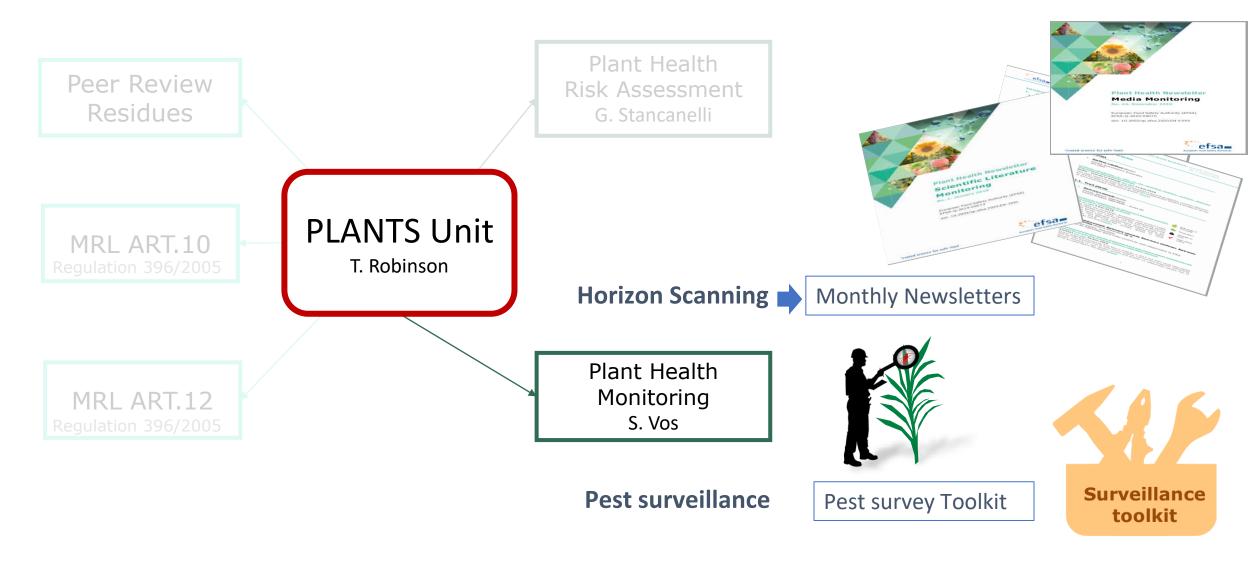
Plant Health and Pesticide Residues Unit (PLANTS)





Plant Health and Pesticide Residues Unit (PLANTS)







The Pest Surveillance Toolkit



Mandate 2017-0137: Provide the EU risk managers with a toolkit for planning and execution of risk-based surveys of quarantine pests

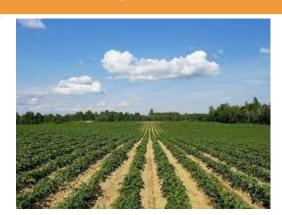
1/Overview of the pest survey toolkit:

2020

2026

Why we need a survey?





Problem: Impossible to inspect all host plant of

an area

Why we need a survey?





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Solution: Estimate a sample size plants

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an area



Solution: Estimate a sample size plants



Methodological framework





Survey process



INITIATE

Why? Suspicion, legal requirement, trade partners, outbreak What type of survey? Detection, Delimiting, Buffer zone

PREPARE

What? Pest
Where? Target Population
When? How? Detection methods

DESIGN

What is the proxy of absence? Confidence, design prevalence How much? Sampling efforts

IMPLEMENT

What data should be collected?
Survey sites, Inspections and procedures

CONCLUDE

How confident are we about the pest freedom? Evidence of pest freedom



Survey process



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Survey process



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Why? Suspicion, legal requirement, trade partners, outbreak What type of survey? Detection, Delimiting, Buffer zone



PREPARE

What? Pest Where? Target Population When? How? Detection methods

Pest survey cards (80 pests)



DESIGN

What is the proxy of absence? Confidence, design prevalence **How much?** Sampling efforts

5 Guideline documents

IMPLEMENT

What data should be collected? Survey sites, Inspections and procedures

CONCLUDE

How confident are we about the pest freedom? Evidence of pest freedom



The Pest Surveillance Toolkit



Mandate 2017-0137: Provide the EU risk managers with a toolkit for planning and execution of risk-based surveys of quarantine pests

1/Overview of the pest survey toolkit:



Mandate 2020-0114: Further develop the toolkit for all QP, tailor the tools to PLH, optimise the survey at crop level

2/ Ongoing developments:



New mandate on pest surveillance





Pest Survey Cards for EU quarantine, protected zone and emerging pests (15 done, over 200 to go) – by 2027





Multi-pest surveys at crop level for 3 pilot crops (potato, citrus, broadleaved trees)
– by 2023



NEW RiBESS+ Tailor for plant pest (survey expert system)

- by 2023





Over 200 pests, interacting with EC

Refined the product, reaching our audience and optimizing access











EFSA Pest Survey Cards Multi-pest surveys at Crop level

Relational database

Crop categories

Berries
Cereals
Citrus fruits
Fruit-bearing vegetables
Grapes
Leaf vegetables
Leguminous
Nuts
Oilseed crops

Ornamental Pome fruits

Potato

Starch vegetables

Stone fruits

Palms

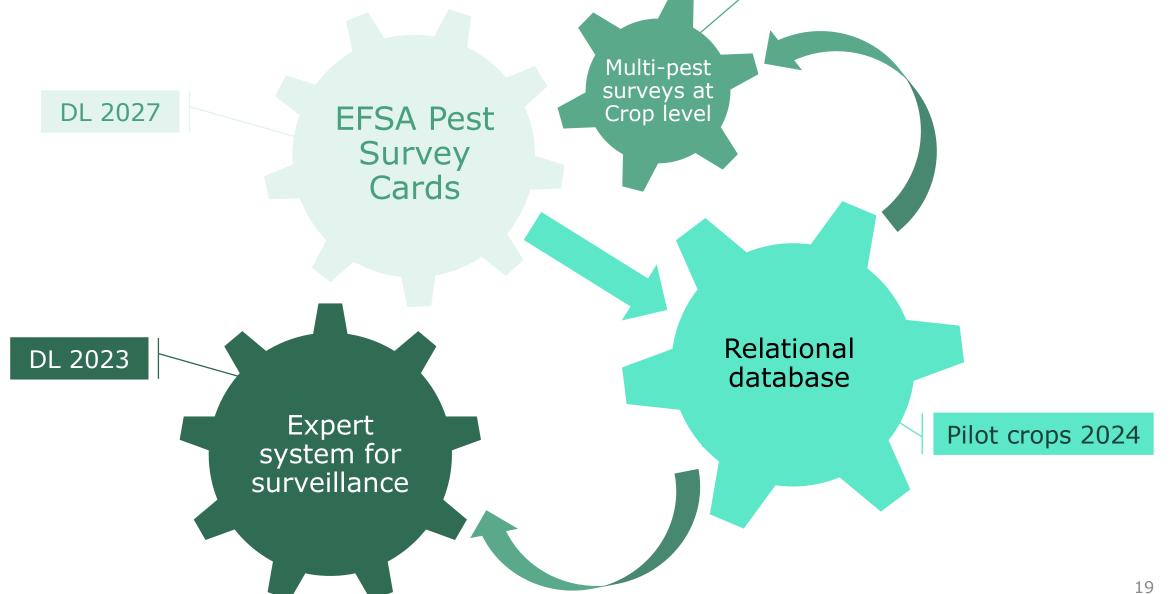
Trees, broadleaved Trees, coniferous

.

surveillance

DL 2023









Extension of Mandate





Extension of Mandate

Communication and training

2022-2024

Ad hoc trainings & BTSF Establish a MSs network

Training of 3rd Countries
Webinars





Extension of Mandate

Communication and training

Support to EC

2022-2024

Ad hoc trainings & BTSF Establish a MSs network

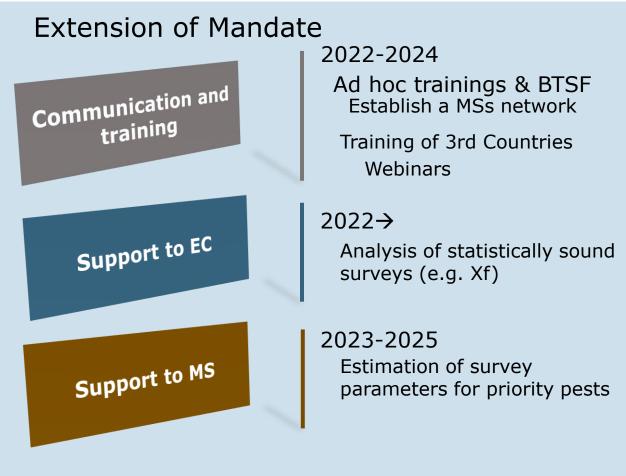
Training of 3rd Countries
Webinars

2022→

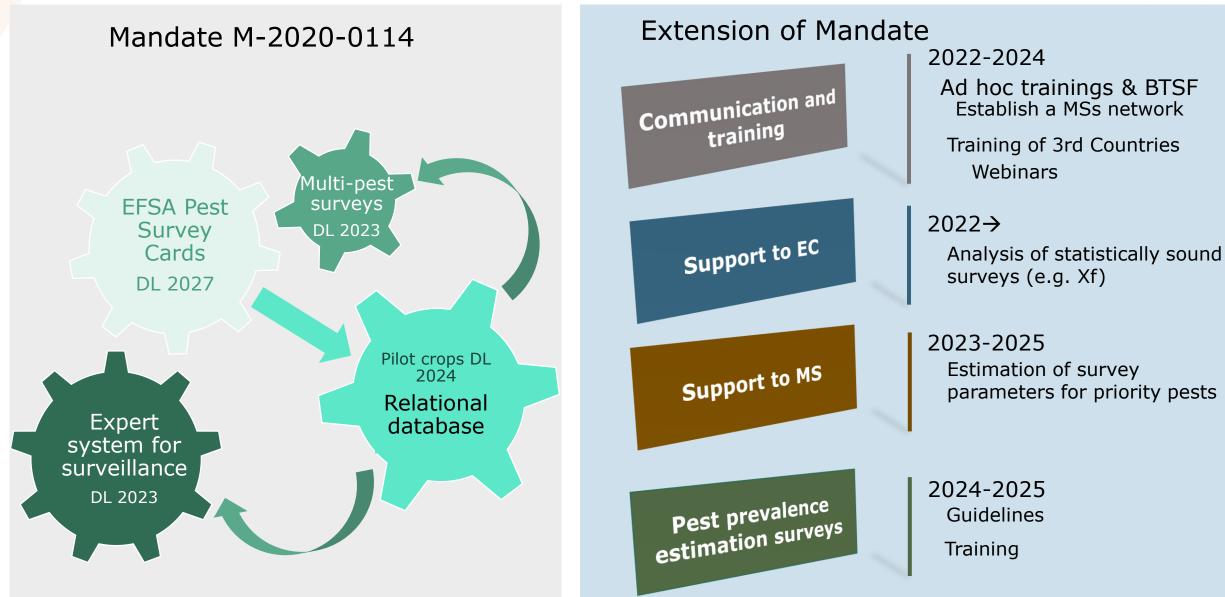
Analysis of statistically sound surveys (e.g. Xf)











Conclusion



- > Survey preparation tailored to each pest and specific situation
- Survey design should be flexible adapting to each situation
- ➤ Robustness of <u>conclusions</u> of surveys designed using the methodological framework depends strongly on the survey preparation
- > Risk based surveys increase the probability to find the pest

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