

Benefits and challenges of pest reporting from a national perspective using the example of Germany

Katrin Kaminski

Benefits and challenges of pest reporting from a national perspective using the example of Germany

- 1. Process and responsibilities of pest reporting in Germany
- 2. Updating pest reports
- 3. What makes determination of the pest status difficult?
- 4. Example
- 5. Challenges of pest reporting
- 6. Benefits from pest reporting



Responsibilities for pest reporting in Germany





Source of first information:

- 1. All persons (private and professionals) must notifiy outbreaks and suspicion to the **regional Plant Protection Service (PPS)** (= competent authorities in the 16 Federal States)
- 2. PPS detect pests (surveys, inspections)
- 3. Information related to other outbreaks, tracing investigations from other NPPOs via JKI

Responsibilities for pest reporting in Germany





1. Regional Plant Protection Services:

- ✓ Investigate the situation, officially confirm the outbreak (including official laboratory result) and impose official measures
- ✓ Determin the pest status for the area/region (including surveys if needed)
- ✓ Include draft pest report in EUROPHYT outbreaks and inform JKI



Responsibilities for pest reporting in Germany

2. Julius Kühn-Institute (JKI):

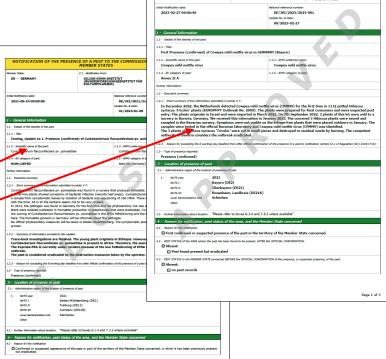
- ✓ National Reference Laboratory
- ✓ PRAs for new pests
- ✓ Technical advice (measures etc.)
- ✓ Check draft report and clarify questions
- ✓ Improve report (coherence, harmonized use of terms, translation, etc.)
- ✓ Determine and include pest status for Germany
- ✓ Notification to EU and EPPO by approval in EUROPHYT outbreaks ...

... and to IPPC via Website

 $\underline{https://pflanzengesundheit.julius-kuehn.de/schaedlinge--auftretensmeldungen.html}$

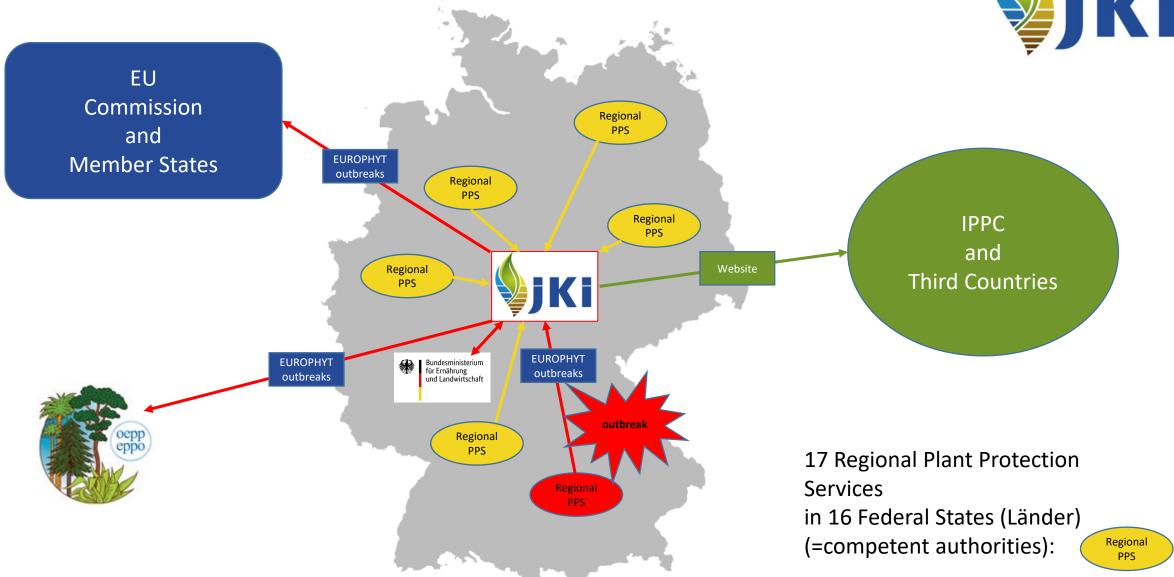






Pest reporting process in Germany





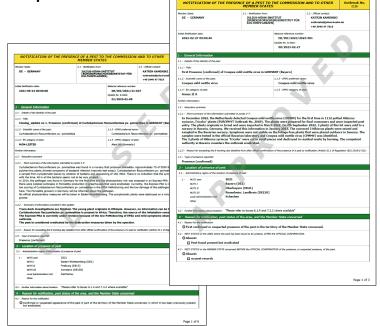
www.julius-kuehn.de

Reasons for updating pest reports



- > Adjustment of official measures (additional measures or lifting e.g. because of RNQP status of pests)
- > Detection of the pest in the buffer zone adjustment of the demarcated area
- > New host plant species infested
- **Eradication** of the outbreak

Correction of the pest report





What makes determination of the Pest Status difficult?

- **JKi**
- Federal structure of Germany regional PPS responsible for the 16 Federal States
- Limited time (reporting deadlines)
- What is the area for the pest status? National and regional
- Difficult diagnosis
- Limited knowledge and availability of information, outdated pest reports
- Limited ressources for surveys
- Difficult tracing investigations (e.g. suspicious plants delivered to final consumers)
- Likelihood of survival and establishment of pests (biology, host plants etc.)
- Pests with long latency period, host plants with latent infection

Based on ISPM 8
A slight uncertainty remains

Too much uncertainty:

determination of pest status not possible

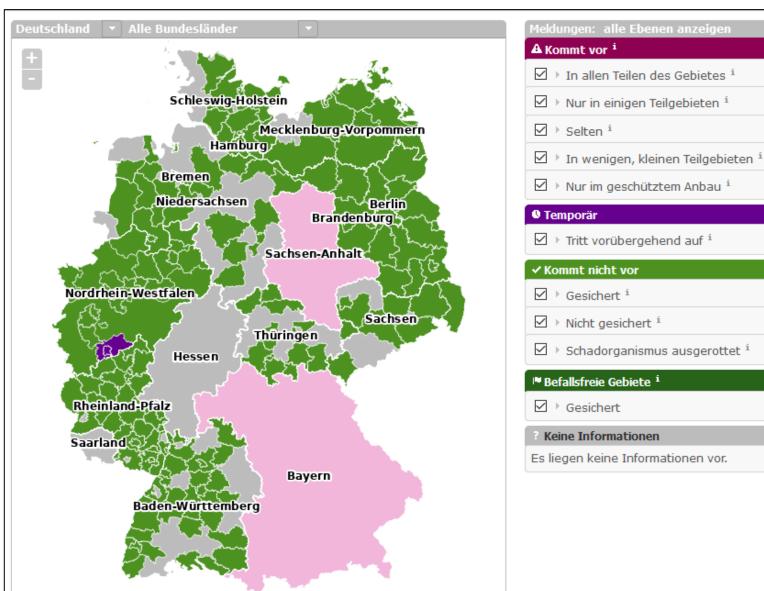
What makes determination of the Pest Status difficult? – helpful techniques



- Teamwork team decisions
- Good network including local authorities, laboratories, PRA experts, scientist etc.
- Priorisation
- Good data management: Databases / IT-tools for longterm data storage, merging local information and evaluation

Database of Pest Status Information in Germany

WAtSon (,WebAtlas für Schadorganismen')





 Pest status indicated per pest

(0)

(0)

(0)

(2)

(0)

(2)

(161)

(0)

(0) ‡‡

(0)

- Pest statuses shown in different colours
- New maps annually, with different levels of administrative areas
- Regional PPS include and update pest statuses in their areas
- Results from surveys and general surveillance

Example of pest report with difficult diagnosis and pest status – *Hirschmanniella* (caudacrena) (Pratylenchidae)



- Nematode listed as Union quarantine pest (Annex II A of IR (EU) 2019/2072)
- Information from the Danish NPPO: suspicious *Vallisneria* water plants delivered from Denmark to Germany (origin Malaysia)
- Trace-forward investigations were carried out > small retailers received small amounts of plants
- Finding in Schleswig-Holstein:
 - > **Difficult diagnosis** (1 adult non-European *Hirschmanniella*, probably *H. caudacrena*)
 - ➤ 10 Vallisneria spiralis ,Tiger' and Vallisneria ,Gigantea' delivered, 3 plants ,Gigantea' found and tested positive, 7 plants already sold to final consumers
 - > Aquarium plants
 - Plants were stored in a basin (other plants tested negative)
 - ➤ Likelihood of establishment in Germany very low in this case
 - Pest status "absent, pest eradicated"



Challenges of pest reporting – data management

- Lack of awareness
- Complex outbreak situations, over a long period of time
- Difficult diagnosis
- Complicated federal structure responsibilities
- Quantity of information:
 - Lack of information / availability ← A lot of information
- Storage of information (databases, IT systems, historical data)
- Quality of information
- (Quick) understanding of notifications
 - Standardized formats ←→ Storytelling
- Data protection issues (especially for geodata)
- Language issues (translation)



Benefits from pest reporting – early warning system



- Early warning system for preparedness
- Learning from others (management information etc.)
- Input for risk assessment
- Identification of survey and research needs
- Good overview of the phytosanitary situation in our own country, including development over time
- Support for review of outbreak developments
- Transparency and justification for import and export situations

Take home message: pest reporting is essential for NPPOs but challenging in practice

