USDA
United States Department of Agriculture

EUPHRESCO

European Phytosanitary Research Coordination

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Science and Technology
Plant Protection and Quarantine

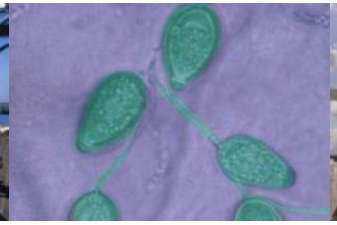
Plant Health Endangered - State of Emergency (Madeira, 2004-09)

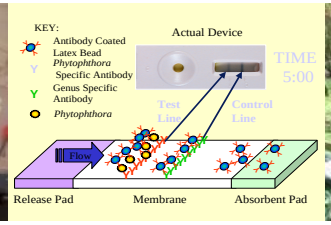
The work of National Plant Protection Organizations (NPPOs) relies on scientific expertise, but the services providing this expertise increasingly lack staff, funds and training.

On the one hand, the whole scientific basis of the phytosanitary field is quickly eroding. Taxonomy, classical plant pathology and other scientific fields which are vital for sustaining sound public policy are threatened with extinction, because they are no longer in the forefront of science priorities.

On the other hand, the need for phytosanitary expertise, training and research is substantially and continuously increasing. The number and complexity of plant pest problems increases every year. New developments and new technology have to be mastered, going far beyond existing expertise.

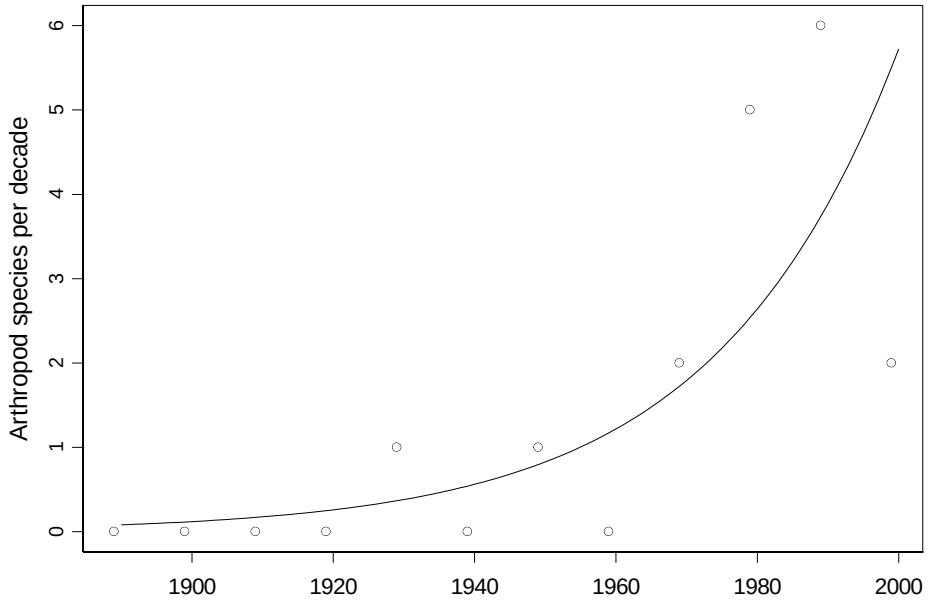
Unless urgent action is taken, indispensable expertise and scientific disciplines will irreversibly disappear, and NPPOs will be unable to do their duty.

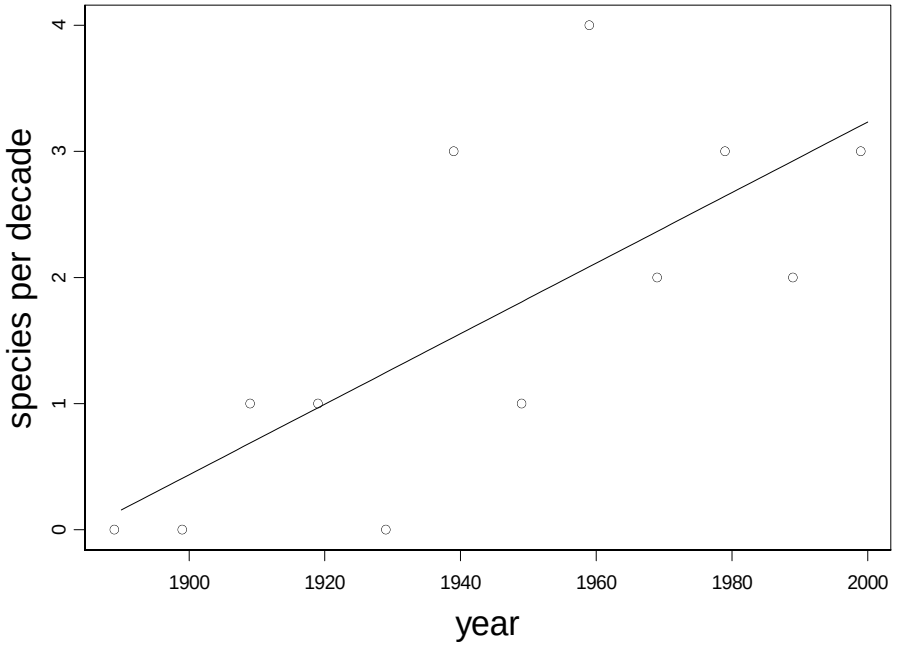



https://www.eppo.int/RESOURCES/position_papers/council_madeira_declaration

- First recordings of non-native arthropod **pests** in Europe (data from Smith 1997)



- First recordings of non-native plant **diseases** in Europe (including bacteria, fungi and nematodes) (Smith 1997)







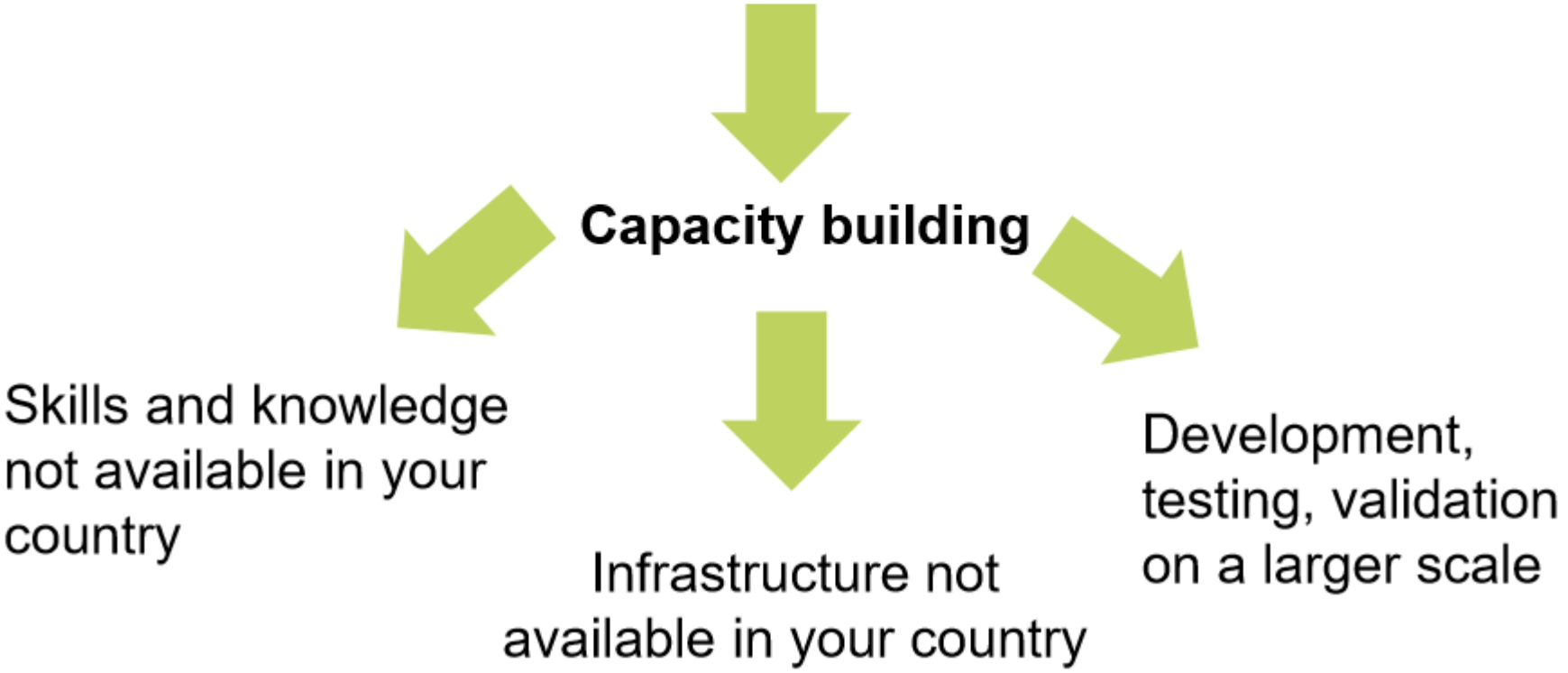

Original aims of EUPHRESCO

- To coordinate transnational research programmes, by developing a common strategic research agenda
- To fund collaborative research projects in the phytosanitary area,
- To support and complement other plant health initiatives,
- To provide scientific evidence to support national and international policy,
- To optimise and make best use of limited national plant health research resources

https://www.euphresco.net/about/

What benefits from participation?

The whole scientific basis of the phytosanitary field is quickly eroding



https://www.euphresco.net/media/EEC-EPPO_workshop/12.pdf

What benefits from participation?

Services are increasingly lacking funds

Optimising the use of resources

Pooling national resources

Avoid overlaps

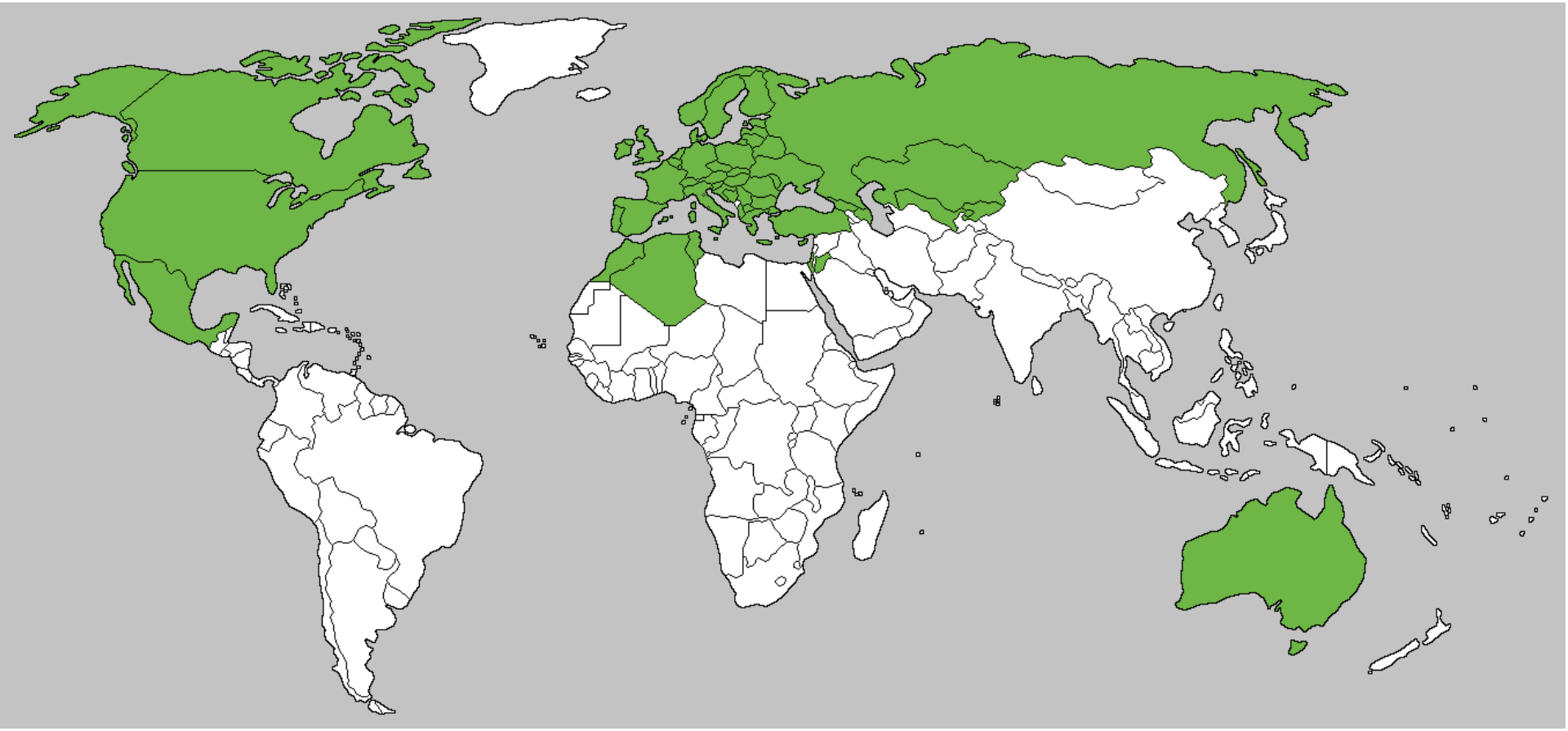
Favour complementarities

https://www.euphresco.net/media/EEC-EPPO_workshop/12.pdf

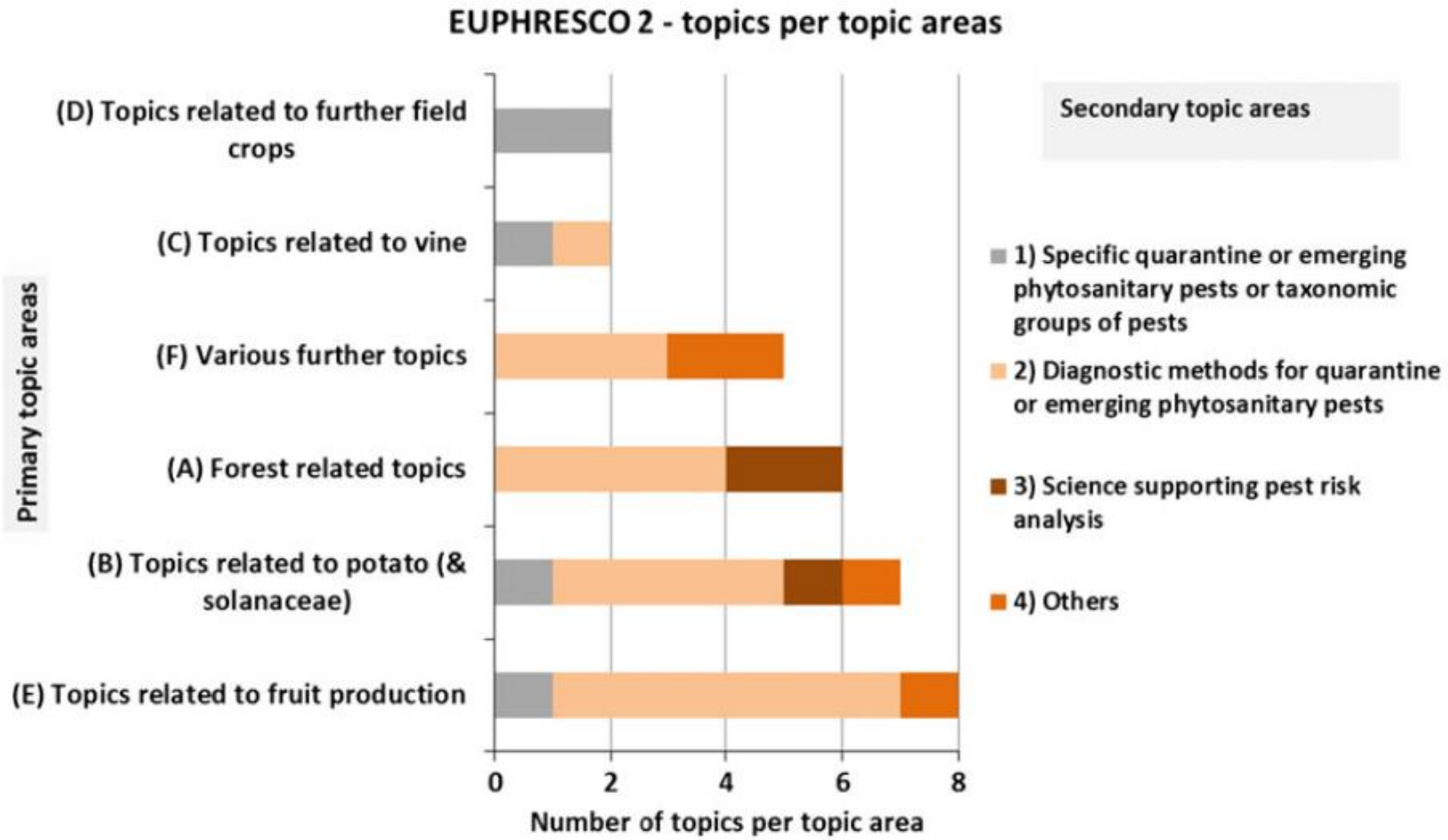
Bearing fruit for the long term

- 68 member organisations from 55 countries
- *Modus Operandi* agreed
- Coordination hosted within EPPO
- Looking for enlargement within Europe and abroad
- Widening the pool of disciplines

Euphresco network, as of February 10 2017



EUPHRESCO Projects



Bulletin OEPP/EPPO Bulletin, (2015) 45 (2), 252–256

PPQ Participation in EUPHRESCO

- ***Laurene Levy's vision***
- Participating since 2015
- Currently participating in 11 projects
- Future opportunities

PPQ Participation in EUPHRESCO Projects

Diagnostics

- Test performance studies of detection tests of Pospiviroides on Solanaceae
- Development of detection methods for viruses on potato (PVT, APMoV, APLV and APMMV) and test performance study
- Faster, cheaper identification of emerging virus problems
- Diagnostics and management of potato cyst nematodes (PCN)
- Next Generation Sequencing (NGS) standards and best practices for regulatory applications

PPQ Participation in EUPHRESCO Projects

Other types of projects

- Remote Sensing
- Risk based sampling
- Inventory of living collections of cyst and root knot nematodes in Europe and their maintenance techniques
- Use of Stable Isotope Ratio Analysis (SIRA) for the identification of invasive species native in alien environments
- Community Network for Plant Health Bioinformatics
- Tree health in urban environments

Realized benefits

- Data sharing
- Material sharing
- Access to high quality science specifically tailored to phytosanitary concerns
- Connecting experts
- Exploring future collaborations
- Cost savings

Acknowledgements : Baldissera Giovani, EUPHRESCO and Laurene Levy