



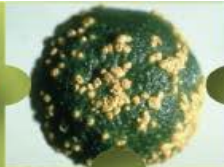
Euphresco

Euphresco and the coordination of diagnostic research

Baldissera GIOVANI, EPPO



Euphresco



Network for phytosanitary research coordination and funding

EPPO Diagnostic Protocols' programme

- Programme started in 1998
- To ensure correct **detection** and **identification** of regulated pests
- To ensure **harmonised** methodology in different diagnostic services/laboratories
- To provide performance criteria for tests



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Diagnostic expertise database since 2007

EPPO Database on Diagnostic Expertise Connect to my lab

[Home](#) [Laboratory list](#) [Expertise list](#) [Technical Auditors/Experts list](#)

FR RU

This database provides an inventory of the diagnostic expertise available in the EPPO region. Its aim is to cover the expertise on regulated pests (i.e. pests of EPPO A1 and A2 Lists, pests mentioned in EPPO standards PM4: *Production of Healthy Plants for Planting*), pests possibly presenting a risk to EPPO member countries (EPPO Alert List) and plants on the EPPO List of invasive alien plants. This database does not include common pests which are widely distributed in the EPPO region. The EPPO Secretariat is maintaining the database but please note that all information included in the database is based on individual expert's own declarations of their expertise.

How to search the database?

Data can be searched by laboratory ([Laboratory list](#)), by expertise on specific pests ([Expertise List](#)) or by auditors ([Auditor List](#)).

Section 'Laboratory List'

All laboratories are included in a table sorted by country. Click on the country name to see the names of laboratories registered in each country. You can access both administrative and expertise details for each laboratory by clicking on its name. You can immediately visualize additional information concerning laboratories, such as whether it has a quality programme, whether it is accredited or offers training. You can refine your selection of laboratories by clicking, for example, on 'quality programme' or any other criteria appearing in the right-hand column of the table. You can also access detailed information on individual expertise by clicking on each line displayed in 'expertise'.

Section 'Expertise List'

All experts are included in a table sorted by the Latin names of organisms diagnosed. To search the 'Expertise List', you can use different criteria and combine them as you wish:

- names of organisms in alphabetical order (simply choose a letter);
- levels of expertise: select 'species' if you want to find the experts who can diagnose a given species, and similarly select genus to find experts who can diagnose most species within a genus, family (most species within a family) or order (most species within an order);
- types of methods used by the experts (morphological, serological, molecular, bioassay, fatty acids or classical microbiology).

Finally, by clicking on the Latin name of the pest you will obtain the name(s) of expert(s). Clicking on the names of the experts



Objectives of EPPPO diagnostic activity

- Production of diagnostic protocols
- Conferences/workshops to exchange information
- Based on individual lab contributions and voluntary basis



Fragmentation



National research programmes

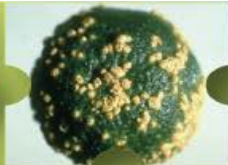
National research implementation

Gap between phytosanitary policy and research



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- **Coordination**
 - Sharing information and best practices
 - Developing a common research agenda
- **Funding**
 - Transnational research funding



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- 48 research projects funded (2006-2014)
- Total of 9M €
- 18 research topics to be funded in 2015

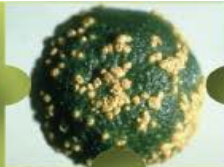


A new round of funding every year



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Past projects (with focus on diagnostics)

- Diagn
espec

Portfolio

The projects funded so far have been successful in:

- Providing the scientific evidence that underpins EC regulatory decisions by supporting the pest risk analysis process.
- Providing diagnostic tools for use by inspection services and diagnostic laboratories for detecting and identifying regulated and quarantine pests (and ensuring that these methods are made widely available and set into European standards), thereby enhancing the operational and scientific phytosanitary capability across Europe.
- Providing methods for eradicating, containing and managing outbreaks of regulated, quarantine and emerging pests.
- Providing opportunities for researchers and scientists to collaborate and therefore enhance Europe's phytosanitary science capability.
- Supporting and linking to other plant health initiatives and coordination mechanisms, e.g. increased cooperation between diagnostic services; development and production of European pest risk analyses; support for plant health infrastructure, e.g. collections, taxonomic expertise, diagnostic proficiency testing.

- Phyto
tools f

niology

- *Bursa*
(BUR)

on

General information and reports from funded projects can be obtained from the table below:

Detection and epidemiology of pospiviroids (DEP)	Project slide	Final report
Strategies for <i>Ambrosia artemisiifolia</i> control (AMBROSIA)	Project slide	Final report
Development and validation of innovative diagnostic tools for the detection of fire blight (<i>Erwinia amylovora</i>) (ERWINDECT)	Project slide	Final report
Phytosanitary efficacy of kiln drying (PEKID)	Project slide	Final report

- QDET



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2015 research topics

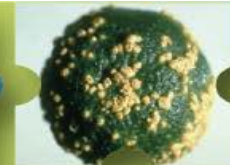
NEW!

- ***Cryphonectria parasitica*** and ***Ceratocystis platani***
- ***Dickeya*** and ***Pectobacterium*** spp. on vegetables and ornamentals
- ***Ralstonia solanacearum*** direct identification on plant tissues
- ***Acidovorax citrulli*** on cucurbit seeds
- Detection of ***Xylella fastidiosa*** in its host plants and vectors
- ***Plum pox virus*** strains in wild hosts and in stone fruit cultivars
- Test performance studies for ***Potato virus Y*** strain detection
- Early detection tools for **fruit fly** species of economic importance
- **Potato cyst nematodes**
- Tracking **vectors** of bacteria and phytoplasmas threatening Europe's major crops.
- Next-Generation Sequencing for the detection and diagnosis of **non-culturable organisms**.

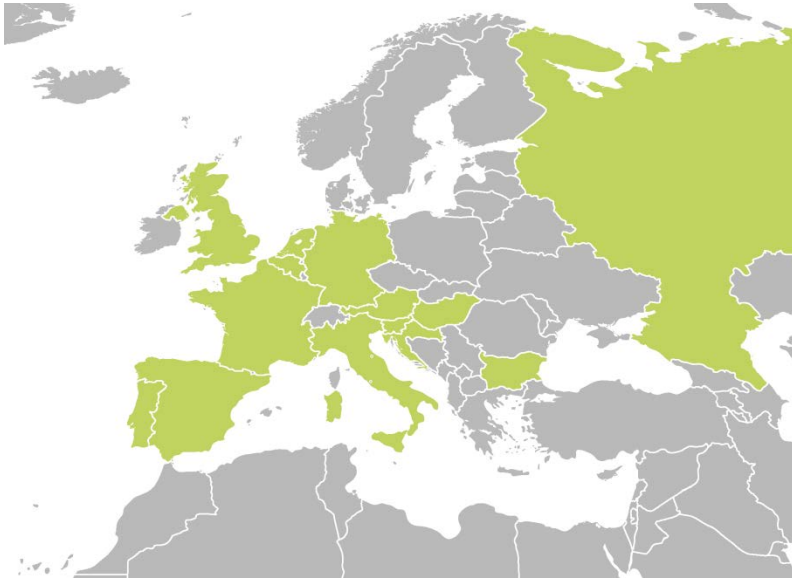


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Xylella fastidiosa consortium

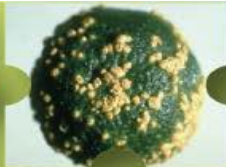


- 17 Euphresco members
- 4 non-members:
 - CISTA (CZ)
 - IAM-Bari (IT)
 - UNITUS (IT)
 - USDA-ARS (US)



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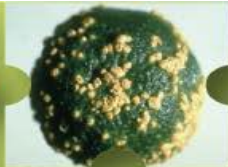


What benefits from participating in Euphresco projects?



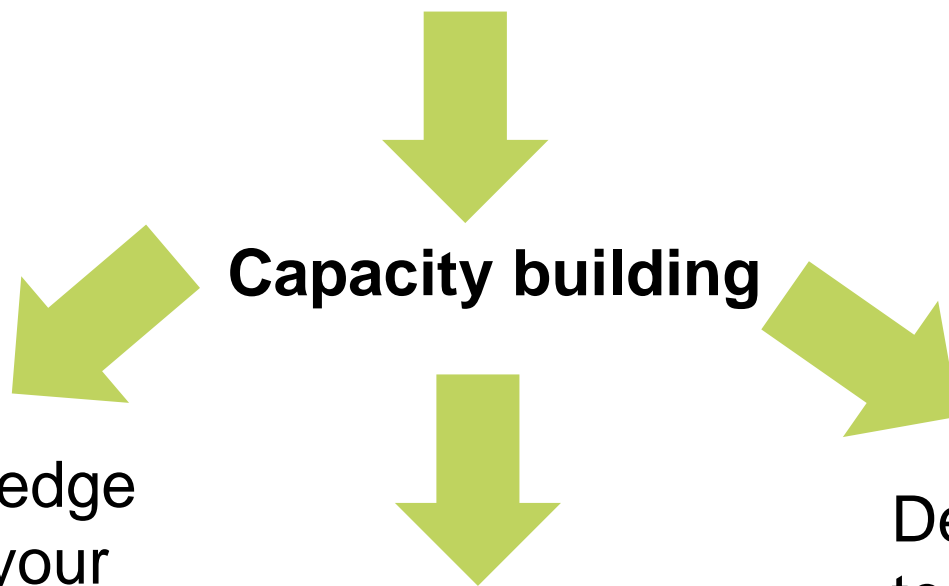
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What benefits from participation?

The whole scientific basis of the phytosanitary field is quickly eroding



Skills and knowledge not available in your country

Infrastructure not available in your country

Development, testing, validation on a larger scale



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What benefits from participation?

Services are increasingly lacking funds



Optimising the use of resources



Pooling national
resources

Avoid overlaps

Favour
complementarities



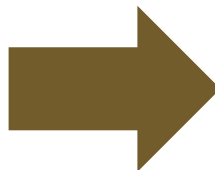
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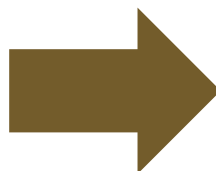
What benefits from participation?

Benefit from wider coordination



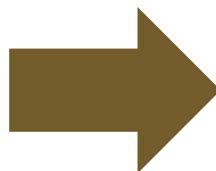
Between countries, organisations, initiatives

More efficient exploitation of projects' results



Increased visibility of project; feeding EPPO core activities

Harmonisation of procedures and data format



Share of information is facilitated



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Euphresco-EPPO relationship

- 'Detection and epidemiology of *Tomato chlorotic mottle virus*' used for the development of generic EPPO Standard for **viroid detection**
- 'Assessment of the impact of *Pospiviroid* on tomato seeds and tomato seeds evaluation of 'tomato', used for the development of **EPPO Standard for *Tomato chlorotic mottle virus***
- 'Ring testing of *Tomato chlorotic mottle virus* for the revision of EPPO Diagnostic Protocol for ***Tomato chlorotic mottle virus***
- 'Ring testing of *Tomato chlorotic mottle virus* for the revision of EPPO Diagnostic Protocol for ***Tomato chlorotic mottle virus***
- 'Ring test on *Gibberella circinata*, maize **7/60**



Euphresco Success story
April 2015

From researchers to national plant protection organisations: Euphresco-EPPO relationship

Since April 1 2014, the coordination of Euphresco is hosted within the European and Mediterranean Plant Protection Organization. The advantages of this are multiple: Euphresco enjoys of an international exposure, and this is fundamental in view of an enlargement of the current Network. Also very important, any information produced by Euphresco and through research projects funded through Euphresco provide valuable support for the development of EPPO Standards, supporting the daily work of national plant protection organisations (NPPOs). Below it is a list of Euphresco projects that have been used, currently used or are planned to be used to support the EPPO diagnostic activity. The list of EPPO Diagnostic Protocols can be found [here](#)

- 'Development and validation of innovative diagnostic tools for the detection of fire blight (*Erwinia amylovora*)' has been used for the revision of PM 7/20
- 'Development and validation of diagnostic methods for *Gibberella circinata* (*Fusarium circinatum*) cause of pitch pine canker' has been used for the development of PM 7/91
- 'Phytosanitary diagnostic, on-site detection and epidemiology tools for fire blight' has been used for the revision of PM 7/20

The following projects are currently used:

- 'Detection and epidemiology of *Pospiviroids*' used for the development of generic Standard on *Pospiviroid* detection

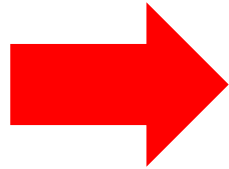


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2016 round of funding

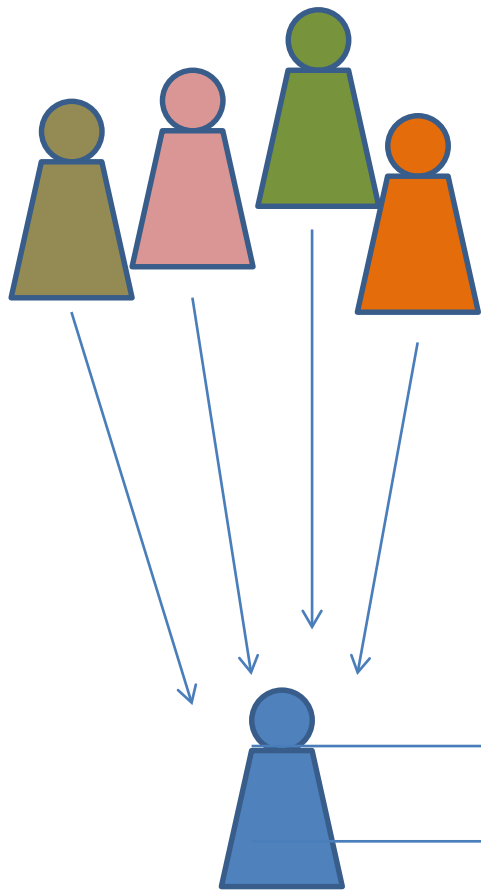


Phase in Round	Start date	End date
Preparation of initiation	02/11/2015	22/11/2015
Initial identification of topic suggestions	23/11/2015	20/01/2016
Merge of topic suggestions	21/01/2016	10/02/2016
Joining listed topic suggestions	11/02/2016	09/03/2016
Establishment of Long List of Topics	10/03/2016	17/03/2016
Topic Coordinator assignment	18/03/2016	22/04/2016
Production of (short) topic description	23/04/2016	03/07/2016
Funding decision phase	04/07/2016	11/11/2016

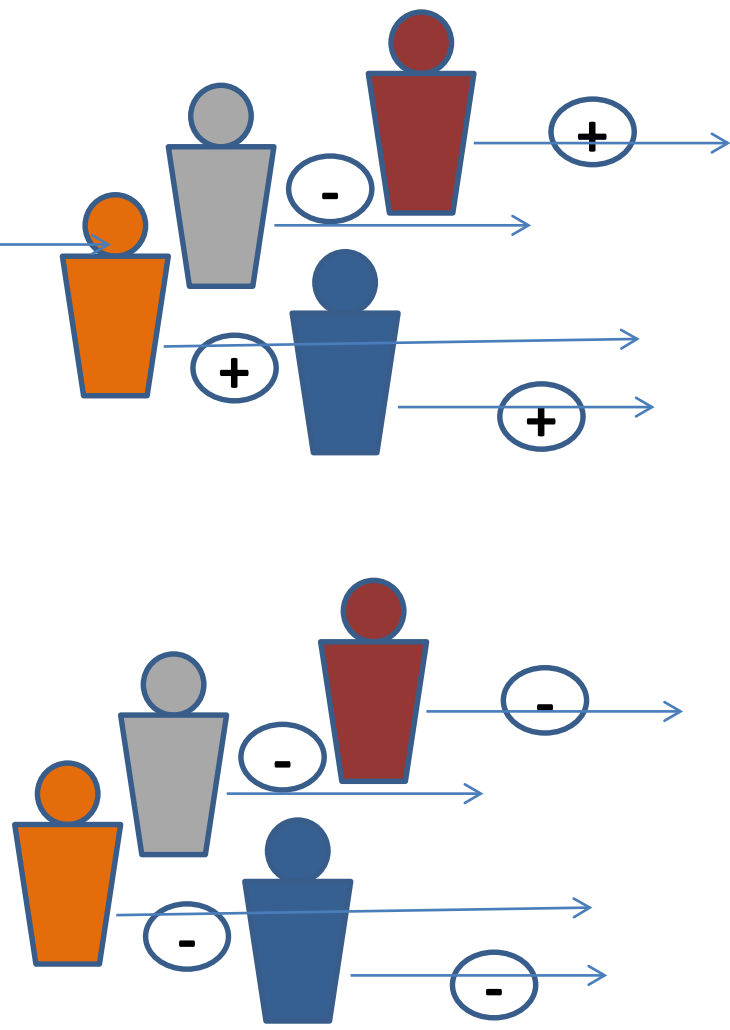


From national suggestions to funding

National process



Euphresco process



FUNDING

FUNDING



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Suggestions to whom?

(Federal Public Service Health, Food Chain Safety and Environment)

Click here to contact the national contact point at Federal Public Service Health, Food Chain Safety and Environment

Website: <http://www.health.belgium.be/eportal>



Belgium

Centre wallon de Recherches Agronomiques
(Walloon Agricultural Research Centre)

Cliquez ici pour contacter le Point de contact national au Centre wallon de Recherches Agronomiques

Website: <http://www.cra.wallonie.be>



Bulgaria

B'lgarska Agentsja po bezopasnost na khranite
(Bulgarian Food Safety Agency)

Кликнете тук, за да се свържете с Националното координационно Свържи в B'lgarska Agentsja po bezopasnost na khranite

Website: <http://www.babh.government.bg/>

Click and send your idea



Canada

Canadian Food Inspection Agency, Plant Health Science Directorate

Click here to contact the national contact point at Canadian Food Inspection Agency

Website: <http://www.inspection.gc.ca/>



Croatia

Hrvatski centar za poljoprivredu, hranu i selo
Croatian Centre for Agriculture, Food and Rural Affairs, Plant protection Institute

Kliknite ovdje da se obratite nacionalna kontakt točka na

Website: <http://www.hcphs.hr/>



Lupini 2000

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