

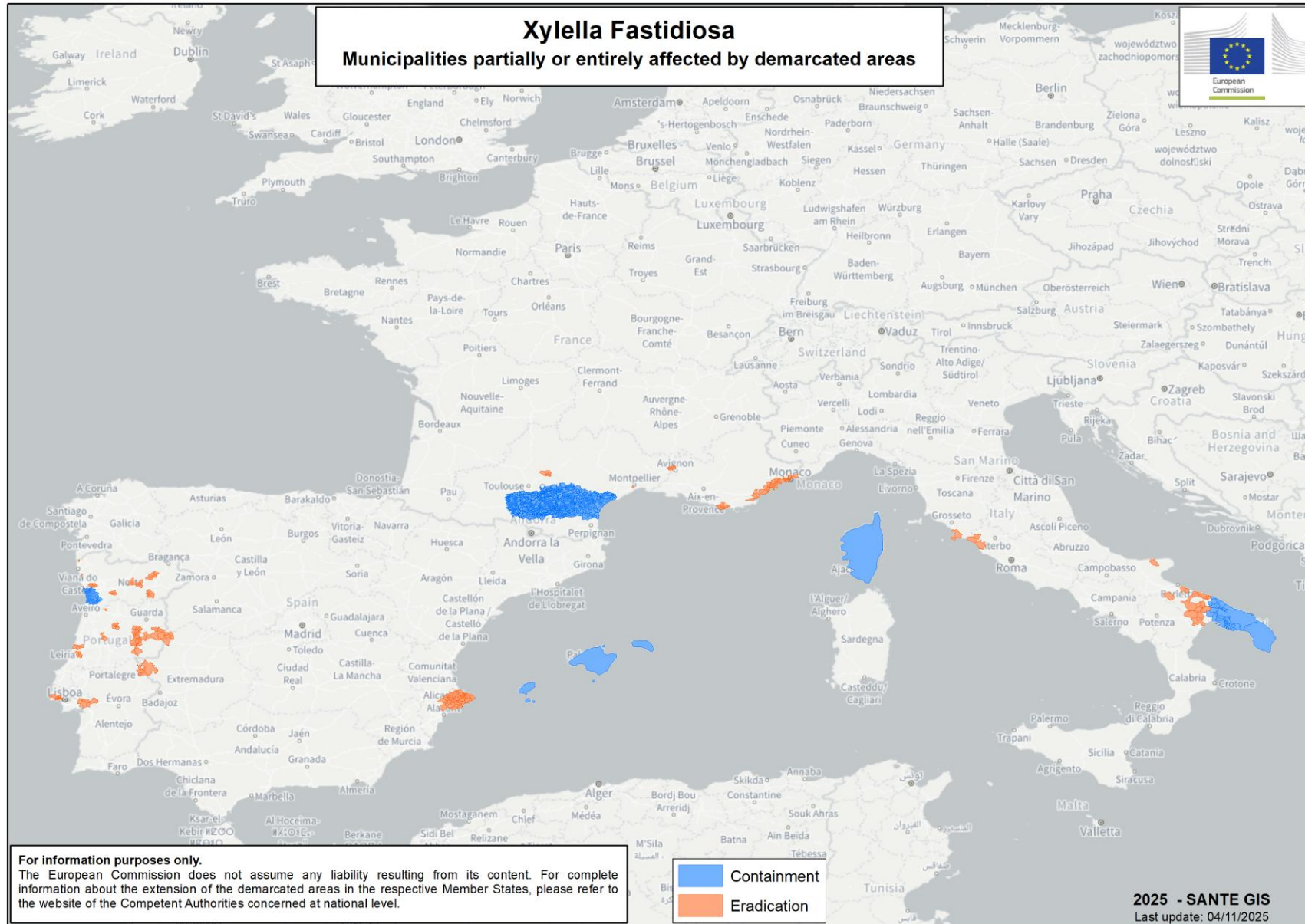


Regulatory status of *Xylella fastidiosa* in the EU

EFSA 5th *Xylella* Conference 2026
23 - 25 June 2026

Dr. Karin Nienstedt
European Commission
SANTE G1 – Plant Health

Demarcated areas in the EU (Nov 2025)

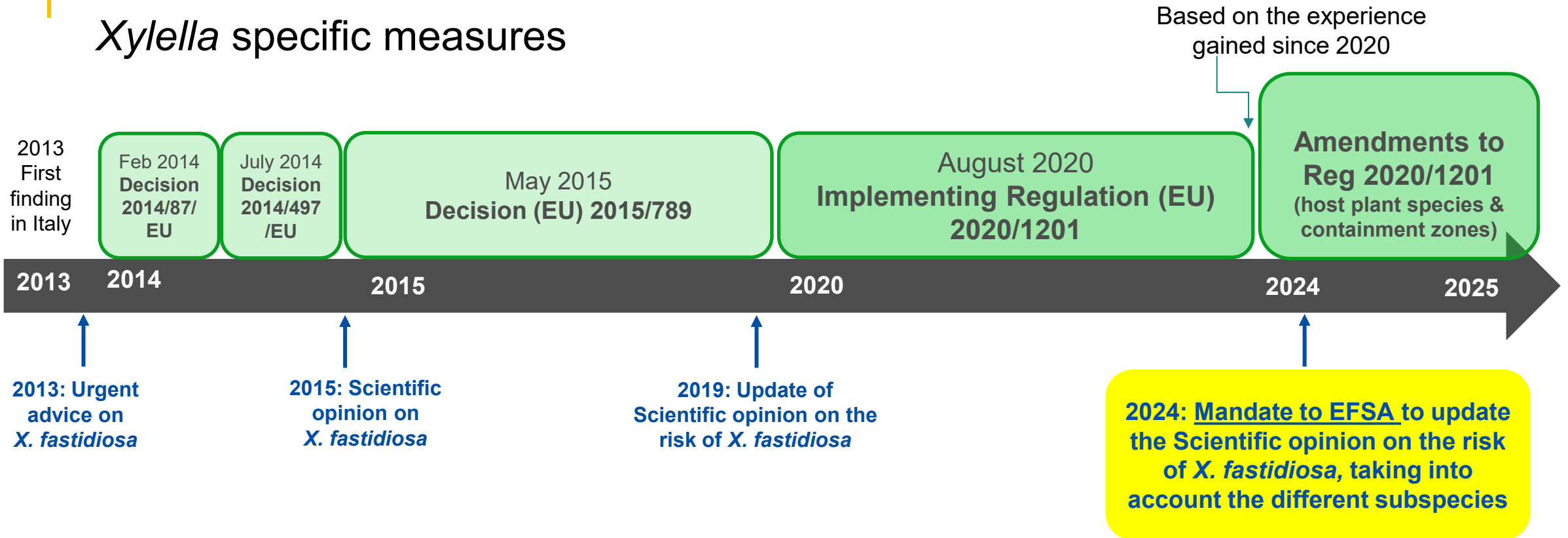


Map available on the website of DG SANTE ([Xylella fastidiosa - European Commission \(europa.eu\)](https://ec.europa.eu/sante/xylella-fastidiosa))

Regular updates, depending on the evolution of the outbreaks

Updates on the EU legislation on *Xylella*

Xylella specific measures

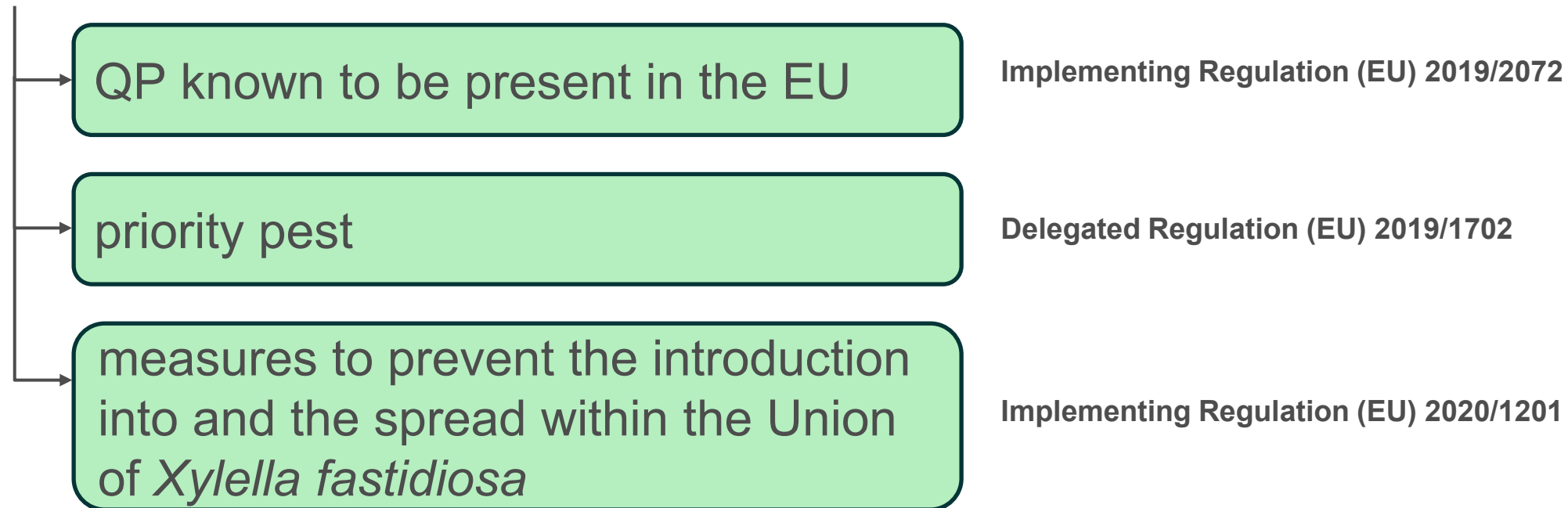


EU legislation in plant health

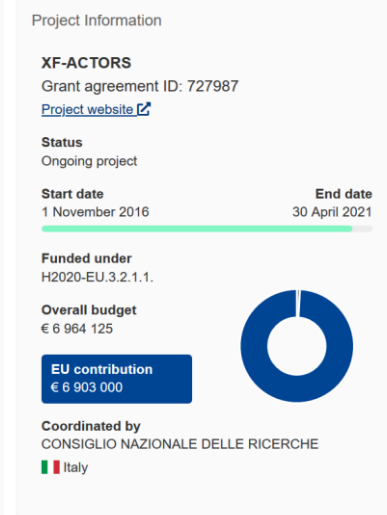
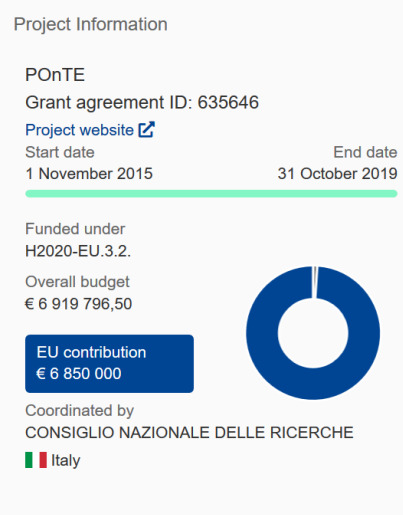
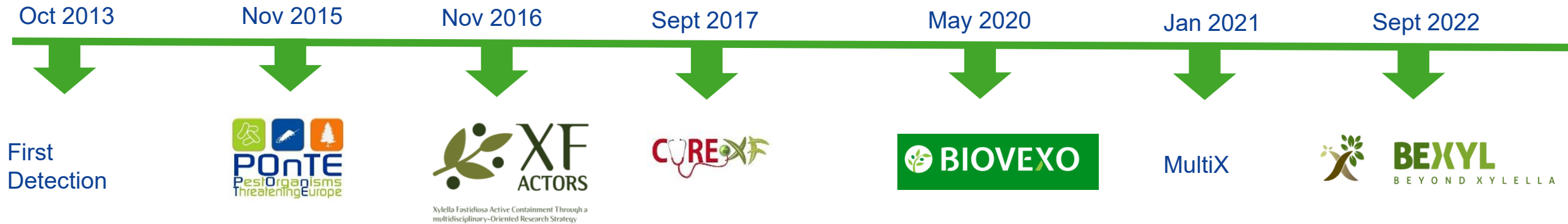
Regulation (EU) 2016/2031

Plant health law

Xylella fastidiosa



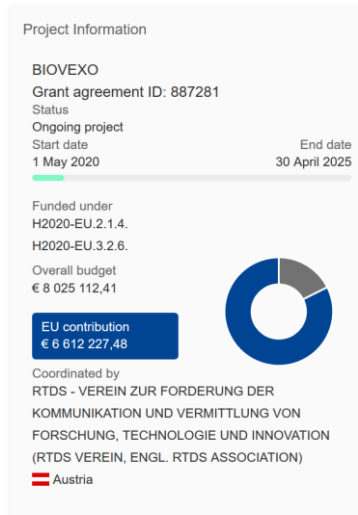
EU Research funding



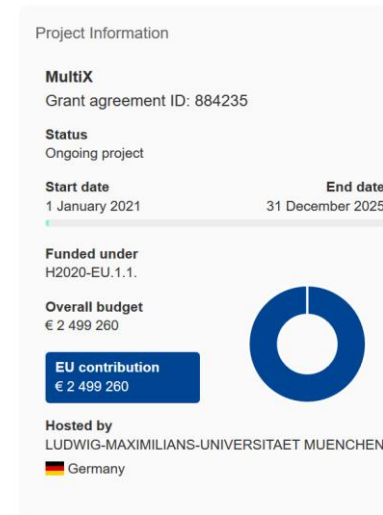
MSCA



BBI



ERC

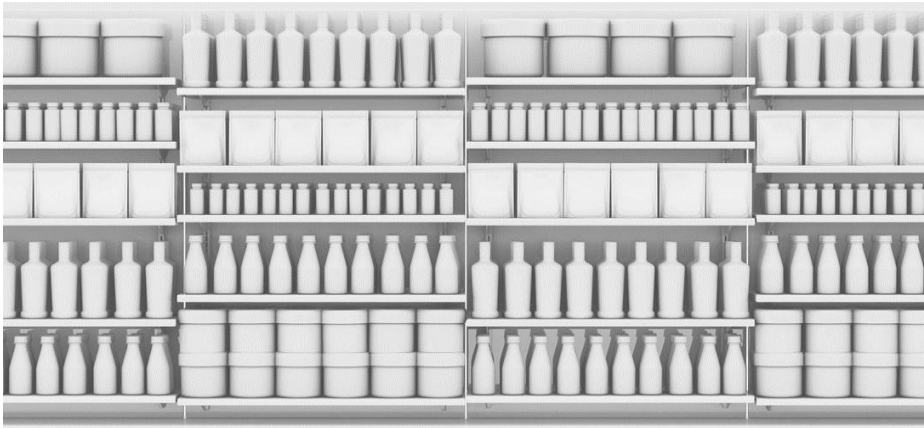


What is next?

- Follow up of output of EFSAs mandate
- Bring solutions to the market

Regulation (EC) No 1107/2009: Placing pesticides on the market

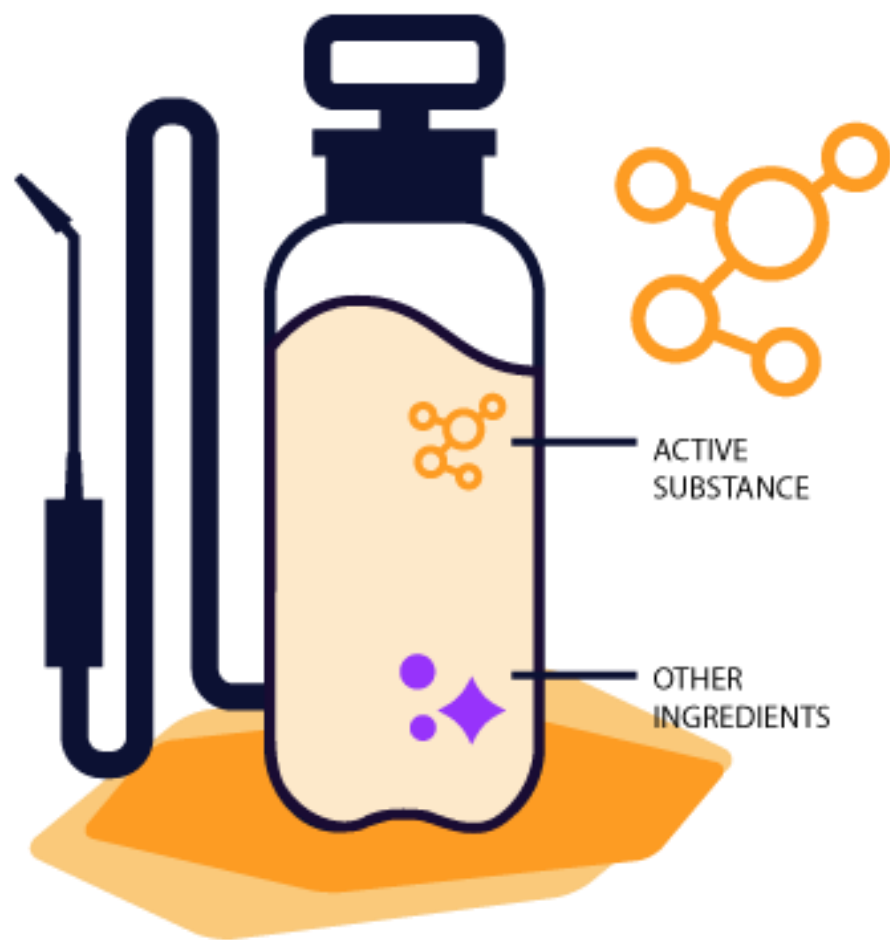
Pharmacy – putting on the shelf



Farmers toolbox



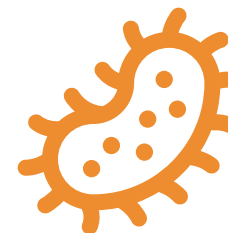
What is a plant protection product?



Types of actives substances



chemical



microbial

Other ingredients:

- co-formulants
- Safeners
- synergists

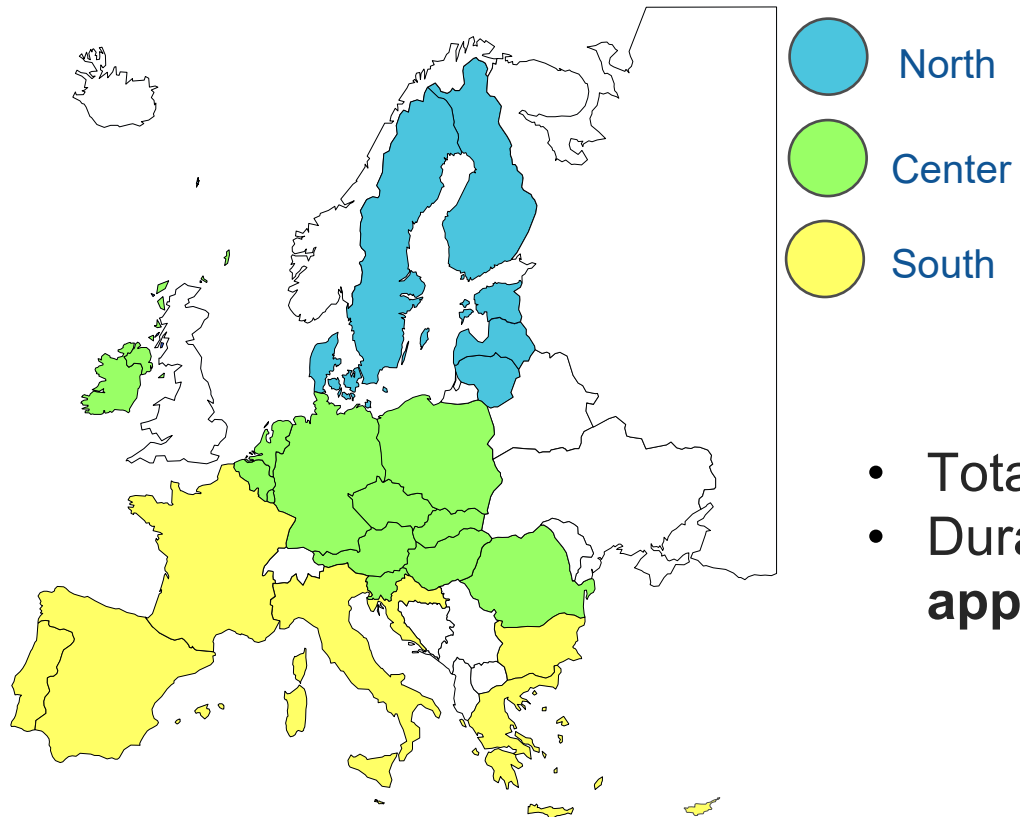
1st step = AS approval at EU level

- Separation of *risk assessment* and *risk management*
- Total length of the procedure = 2,5 to 3 years
- Approval for maximal 15 years



2nd step= PPP authorisation (MS level)

3 regulatory zones



- One PPP-evaluation per zone - MS **co-operate** in the assessment of applications
 - Other MS can grant **mutual recognition** (can be requested also by 3rd parties like farmer associations, research)
 - MS authorise **minor use extensions** (Art 51)
 - MS can grant **emergency authorisations** (Art 53)
-
- Total length of the regular procedure = 16 to 22 months
 - Duration of a regular authorisation of a PPP: **Duration of approval of substance + one year**

Prospective applicant - how to get a new (bio)pesticide on the market?

- Prepare an **application for approval of AS (AS + PPP dossier)**
 - It is essential to prepare a good dossier – get ready:
 - which representative PPP use(s), one or more representative uses?
 - which data are needed, how to organise the IUCLID submission?
 - get advice (consultant)?
 - Select RMS and contact it early (waiting time for assessments)
 - Ask for pre-submission advice by RMS and EFSA and prepare well your questions
- Follow the progress of your dossier and get ready for in-time **PPP applications at MS**

Relevant for new biopesticides:

- Data requirement (DR) & uniform principles
 - Part B – microorganisms (biological properties central role, conditionality build into DR)
 - Part A - chemicals - applies also to pheromones/semiochemical, botanicals-plant extracts, peptides, antibodies, RNAi
- Introduction (point 1.5) of data requirements

*“The information shall include ... such **information shall not be required**, where one of the following conditions is fulfilled: (a) it is not necessary **owing to the nature of the product or its proposed uses**, or it is not scientifically necessary; (b) it is technically not possible to supply. In such a case **a justification shall be provided.**”*

- Problem formulation guidance document
- amendment to further clarify point 1.5 is under discussion at PAFF
- Specific GDs (e.g. GD on virus)



“need to know”



“nice to know”

Nice to know...
or NEED to know?

Time to
EVALUATE



European
Commission

Relevant for new biopesticides (under Co-Decision negotiation):

- ❑ SANTE simplification package with targeted amendments to Reg.(EC) No 1107/2009:
 - Biocontrol active substances are eligible for unlimited approval (Article 5)
 - Possibility for EFSA to assume the role of rapporteur Member State (Article 7)
 - Fast-track for assessing applications for new biocontrol substances (Article 11) and for plant protection products containing them (Article 37)
 - Possibility for Member States to grant provisional authorisation for plant protection products containing new biocontrol active substances while approval procedures are still ongoing (Article 30)
 - Reinforced zonal authorisation and mutual recognition (Articles 3, 37 and 42)
 - Exemption from record keeping obligations for biocontrol products (Article 67)

Useful links

Plant health including Xylella

- ❑ https://food.ec.europa.eu/plants/plant-health-and-biosecurity_en
- ❑ Reg 2016/2031 <https://eur-lex.europa.eu/eli/reg/2016/2031/oj/eng>
- ❑ Reg 2019/2072 https://eur-lex.europa.eu/eli/reg_impl/2019/2072/oj/eng
- ❑ Reg 2019/1702 https://eur-lex.europa.eu/eli/reg_del/2019/1702/oj/eng
- ❑ Reg 2020/1201 https://eur-lex.europa.eu/eli/reg_impl/2020/1201/oj/eng

Plant protection products legislation

- ❑ Reg 1107/2009: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02009R1107-20221121>
- ❑ Data requirement active substances: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02013R0283-20221121#tocId10>
- ❑ Data requirement PPP: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02013R0284-20221121>
- ❑ Uniform principles: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02011R0546-20221121>
- ❑ General EC page on Micro-organisms in plant protection: https://food.ec.europa.eu/plants/pesticides/micro-organisms_en
- ❑ Explanatory notes: https://food.ec.europa.eu/system/files/2023-10/pesticides_ppp_app-proc_guide_imp-data-req_micro-organisms-ppp_imp-reg-11072009.pdf
- ❑ Guidance document on AMR: https://food.ec.europa.eu/system/files/2020-11/pesticides_ppp_app-proc_guide_180652_microorganism-amr_202011.pdf
- ❑ Guidance document on secondary metabolites https://food.ec.europa.eu/document/download/ffdf09b5-77a5-45b5-95f9-b16272f7535a_en?filename=pesticides_ppp_app-proc_guide_180653_microorganism-metabolites-concern.pdf
- ❑ Commission communications: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023XC0609%2802%29&qid=1686297487173> AND <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023XC0609%2801%29&qid=1686297476366>
- ❑ Database of guidance documents: <https://webgate.ec.europa.eu/dyna2/pgd/>
- ❑ Problem formulation document: https://food.ec.europa.eu/document/download/c4d6b7df-b7f9-4b3b-8ce5-b823ccdcf98c_en?filename=pesticides_ppp_app-proc_guide_horiz_problem-formulation-era.pdf



Xylella fastidiosa

5th European conference

Bari, Italy | 22-26 June 2026



REGIONE PUGLIA

International Plant Protection Convention's Mission and Global Impact

- Recognized as a standard-setting organization for plant health by the WTO SPS Agreement along with *Codex Alimentarius* and WOAH (“SPS sisters”).
- **Part of the CBD Liaison group for biodiversity related conventions** (CBD, CITES, CMS, Ramsar Convention, IPPC, ITPGRFA, IWC, World Heritage Convention)
- IPPC Secretariat collaborating with 10 Regional Plant Protection Organizations and over 40 international organizations.
- Adoption of **46 ISPMs, the development of over 20 IPPC guides and 10 e-learning courses** strengthened global phytosanitary standards for safe trade.



(Since 1951) International treaty to secure cooperation among nations in protecting global plant resources from the spread and introduction of pests of plants, in order to preserve food security, and biodiversity and to facilitate safe trade.

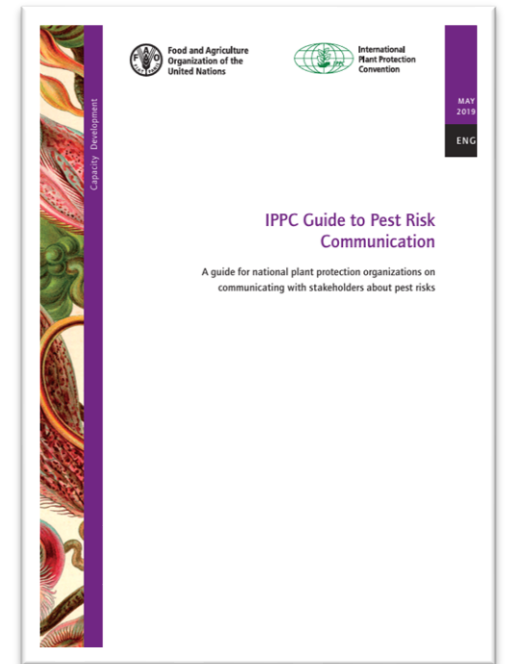
Xylella fastidiosa: a historic turning point for plant health

Xylella underscored the need for collaboration among:

- National Plant Protection Organizations and Regional Plant Protection Organizations
- Researchers
- International organizations, including EFSA and the IPPC
- Donors
- Farmers and the private sector
- The general public — including travelers, gardeners and young parents
- The media

Operational recommendations must be underpinned by research:

- through **meta-analysis**; and
- through **interdisciplinarity** and the systematic integration of **social sciences** to better understand public perceptions before pest introduction, during outbreaks, and in relation to the acceptability of control measures.





How to identify the next emerging pest?

The IPPC Pest Outbreak Alert and Response System (POARS)

A system built for **early warning** that issues **global pest alerts** for emerging pests

Global coordination mechanisms with:

- targeted actions to reduce the impact of emerging pests; and,
- structured methodology and criteria for identification of Emerging Pests of global concern
- a mechanism to promote **harmonized technical approaches** and common reference materials to support a **shared technical understanding for early coordination** and collective action to strengthen **prevention, preparedness, and response**

<https://www.ippc.int/en/core-activities/capacity-development/programmes/strengthening-pest-outbreak-alert-and-response-systems/>



Emerging Pests of global concern – POARS Quick Access Hub

The POARS page on the IPPC website will serve as the central hub for emerging pest intelligence, linking alerts, technical information and guidance to support **prevention**, **preparedness** and **response** actions.

Bactrocera dorsalis

Oriental fruit fly

Diptera: Tephritidae

Key hosts include mango, citrus and many other fruit crops. Rapid population build-up and long-distance spread through trade in infested fruit cause major market-access and production losses.

Xylella fastidiosa

vector-borne xylem-limited bacterium

Bacteria: Xanthomonadaceae | Multiple subspecies, wide host range

Causes severe diseases in olives, citrus, grapevine and many ornamental and wild hosts. Spread is driven by xylem-feeding insects and movement of infected planting material.

Lycorma delicatula

Spotted lanternfly

Hemiptera: Fulgoridae

Attacks grapes, fruit trees and ornamentals, with heavy honeydew production and sooty mould that affect yield and quality. Long-distance movement occurs via egg masses on trade goods.

Rhynchophorus ferrugineus

Red palm weevil

Coleoptera: Curculionidae | Internal borer of palms

A destructive pest of date, coconut and ornamental palms, causing internal damage that is often asymptomatic until collapse.

Rhizoctonia theobromae

Ceratobasidium theobromae

Basidiomycete pathogen

Associated with serious cacao pod and stem diseases and reported in cassava. Expert Working Group (EWG) to develop inputs and practical guidance for NPPOs.

Orobanche cumana

Sunflower broomrape

Orobanchaceae | Holoparasitic weed of sunflower

Root parasite causing significant yield losses in sunflower, with highly virulent races overcoming host resistance and spreading through seed and soil movement.

Fusarium oxysporum f. sp. *cubense* TR4

Banana Fusarium wilt TR4

Fungi / Oomycetes (Ascomycota) | Soil-borne vascular wilt

Causes wilt of Cavendish and many dessert bananas. The pathogen persists in soil and planting material, with eradication extremely difficult once established.

Investing in education: IPPC Plant Health Campus



Welcome to the IPPC Plant Health Campus.

The IPPC Plant Health Campus is your portal to e-learning courses, guides and technical information focused on key phytosanitary systems.

The content is aimed at national plant protection organizations (NPPOs), NPPO staff, phytosanitary capacity evaluation (PCE) facilitators, plant health partners, stakeholders and students, with the overall goal of strengthening national phytosanitary capacity.



Featured Video

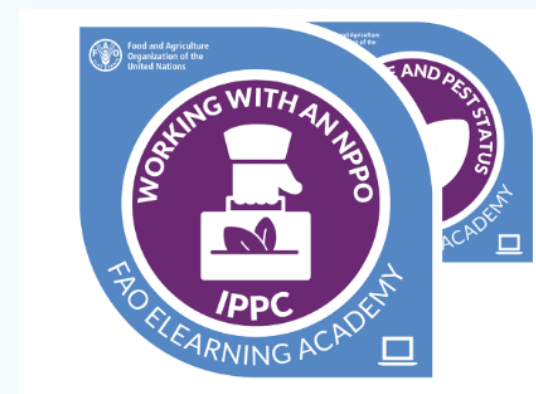


Standard Setting Procedure - IPPC

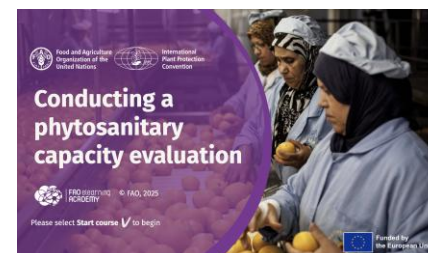
RESOURCES

Certified learning, recognized globally

- 1 Upon completing a course, learners receive a **digital badge or certificate**.
- 2 Learners are encouraged to share badges on **LinkedIn and other platforms**, helping build a visible, global community.



A growing library of learning: a rich selection of e-learning courses and tools



Investing in education: FAO elearning Academy Global Youth Contest

- The FAO eLearning Academy is launching a [global youth contest](#) for participants aged 18–35, with a special category dedicated to the IPPC Plant Health Campus.
- Four winners will receive a **fully funded trip to Rome** to attend the World Food Forum from 12 to 15 October 2026, including one selected from the plant health category.



Applicants must demonstrate how their learning has translated into real-world impact, with explicit reference to the IPPC Plant Health Campus.

Applications, written in English, must be submitted **by 31 July 2026**.



Thank you

www.ippc.int
Sarah.Brunel@fao.org





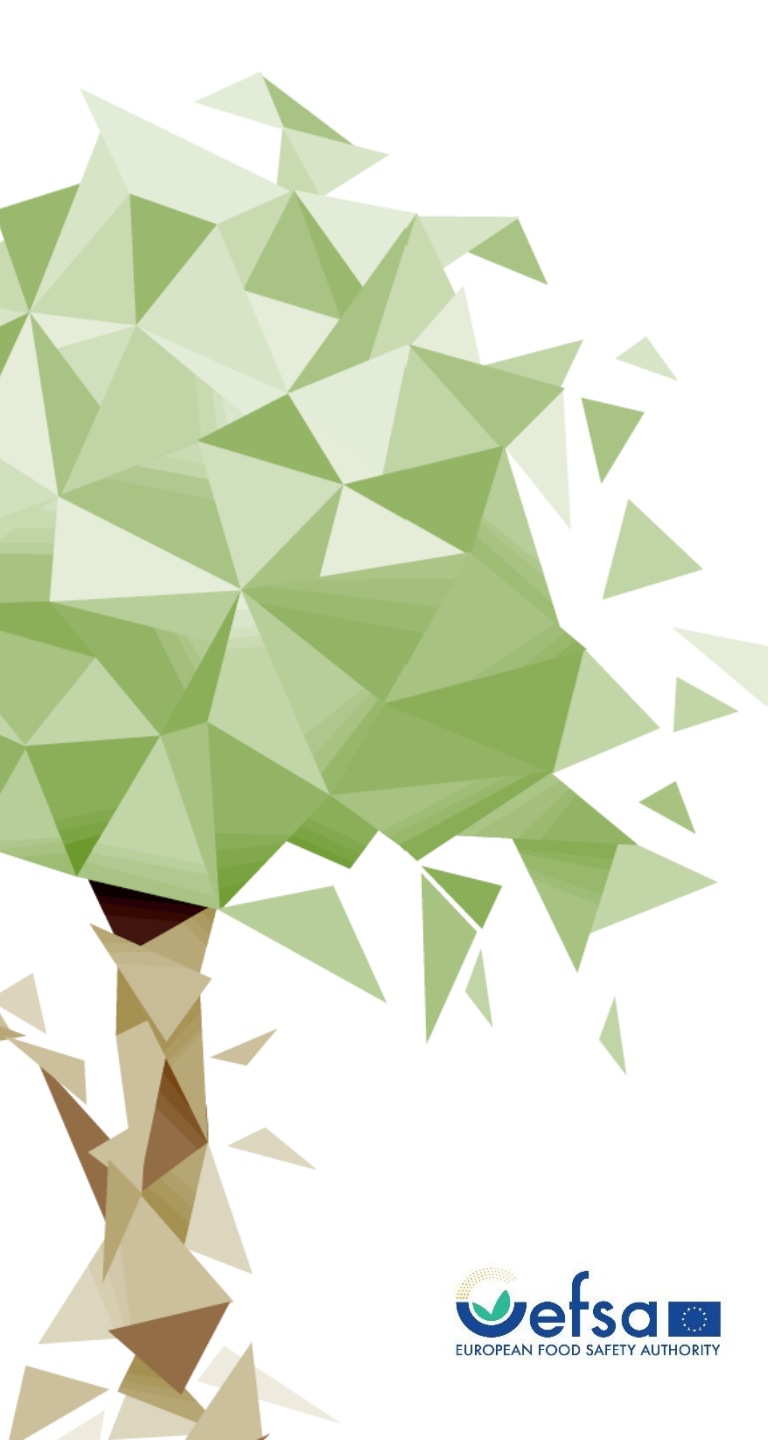
Xylella fastidiosa

5th European conference

Bari, Italy | 22-26 June 2026



REGIONE PUGLIA



Updating the pest risk assessment of *Xylella fastidiosa* for the EU territory: achievements and next steps

Matteo Crotta

matteo.crotta@efsa.europa.eu

Scientific Officer

EFSA - PLANTS Unit

Plant Health Risk Assessment team



EFSA HAS BEEN WORKING ON *XYLELLA FASTIDIOSA* SINCE 2013 (MORE THAN 30 SCIENTIFIC OPINIONS AND REPORTS)



European Food Safety Authority

EFSA Journal 2013;11(11):3468

STATEMENT OF EFSA

Statement of EFSA on host plants, entry and spread pathways and risk reduction options for *Xylella fastidiosa* Wells et al.¹

European Food Safety Authority^{2,3}

European Food Safety Authority (EFSA), Parma, Italy



European Food Safety Authority

EFSA Journal 2015;13(1):3989

SCIENTIFIC OPINION

Scientific Opinion on the risk to plant health posed by *Xylella fastidiosa* in the EU territory, with the identification and evaluation of risk reduction options¹

EFSA Panel on Plant Health (PLH)^{2,3}

European Food Safety Authority (EFSA), Parma, Italy

ABSTRACT

The EFSA Panel on Plant Health conducted a pest risk assessment and an evaluation of risk reduction options for *Xylella fastidiosa*. *X. fastidiosa* has been detected in olive in the EU with a distribution restricted to the region of Apulia in Italy and is under official control. *X. fastidiosa* has a very broad host range, including many common



Scientific Opinion |  Open Access |   

Effectiveness of *in planta* control measures for *Xylella fastidiosa*

EFSA Panel on Plant Health (EFSA PLH Panel), Claude Bragard, Katharina Dehnen-Schmutz, Francesco Di Serio, Paolo Gonthier, Marie-Agnès Jacques, Josep Anton Jaques Miret ... [See all authors](#) ▾

First published: 15 May 2019 | <https://doi.org/10.2903/j.efsa.2019.5666> | Citations: 1



Scientific Opinion |  Open Access |   

Update of the Scientific Opinion on the risks to plant health posed by *Xylella fastidiosa* in the EU territory

EFSA Panel on Plant Health (PLH), Claude Bragard, Katharina Dehnen-Schmutz, Francesco Di Serio, Paolo Gonthier, Marie-Agnès Jacques, Josep Anton Jaques Miret ... [See all authors](#) ▾

First published: 15 May 2019 | <https://doi.org/10.2903/j.efsa.2019.5665> | Citations: 12



Terms of reference

Acceptance
30th May 2024

Deadline
30th Nov 2026

Terms of reference

EFSA is requested, pursuant to Article 29 of Regulation (EC) No 178/2002, to provide a scientific opinion.

In particular, EFSA is requested to update the Scientific Opinion on the risks to plant health posed by *Xylella fastidiosa* in the EU territory published on 15 May 2019¹.

EFSA should take into account the subspecies of *Xylella fastidiosa* and the susceptible plant species detected so far in the EU territory, since the first outbreak notified by Italy in October 2013 until the present. EFSA should re-evaluate, for each sub-species of *Xylella fastidiosa* present in the EU territory, the probability of spread and establishment of *Xylella fastidiosa* in the rest of the EU territory, together with the impact of the pest. This analysis should include for the eradication and the containment approach, different scenarios of removal of infected plants in the infected area. In the case of the containment approach, the focus shall be in the last kilometres of the infected zone adjacent to the buffer zone, where there is the obligation to carry out surveys and remove infected plants. The evaluation should also take into account the assessment of the latency period of the different subspecies of *Xylella fastidiosa*, as well as the potential spread of each subspecies by insect vectors. The impact assessment should consider the outputs of the ongoing activities on Union quarantine priority pests. Based on recent scientific developments, EFSA should also review any relevant risk reduction option, in addition to the removal of infected plants, to prevent the further spread of those subspecies of *Xylella fastidiosa* into the rest of the EU territory.

In this assessment, EFSA shall take into account the available scientific information, in particular, the data linked to the outbreaks of *Xylella fastidiosa* in the EU territory.



Working group

Experts (WG members): Blanca B. Landa (Chair), Nik Cuniffe (Vice chair), Domenico Bosco, Claude Bragard, Martina Cendoya, Leonardo De La Fuente, David Makowski, Juan A. Navas Cortes, Rachel Russell, Antonio Vicent Civera

EFSA (PLANTS): Matteo Crotta, Ewelina Czwieniczek, Andrea Maiorano, Tarla Murphy, Giuseppe Stancanelli, Oumayma Jemei, Rachel Vaughn, Anastasia Terzidou

EFSA (MESE): Olaf Mosbach-Schulz

EFSA – CREA: Alex Gobbi, Sofia Bajocco, Simone Bregaglio, Lorenzo Crecco, Eleonora Del Cavallo, Chiara Morena, Giovanni Poggi





Working group – Hearing experts

Rodrigo Almeida

Ofir Bahar

Ana Marcia Barbosa

Nuno Barbosa

Francesca Bertelli

Nicola Bodino

Donato Boscia

Daniela Cornara

Alexandra Correia

Ana Paula Cruz de Carvalho

Pauline de Jerphanion

Salvatore Infantino

Marta Lopez Serra

Emanuele Marcucci

Diego Olmo

Francesco Palmisano

Anna Percoco

Roberto Sanz Diez

Maria Saponari

Maria Clara Serra

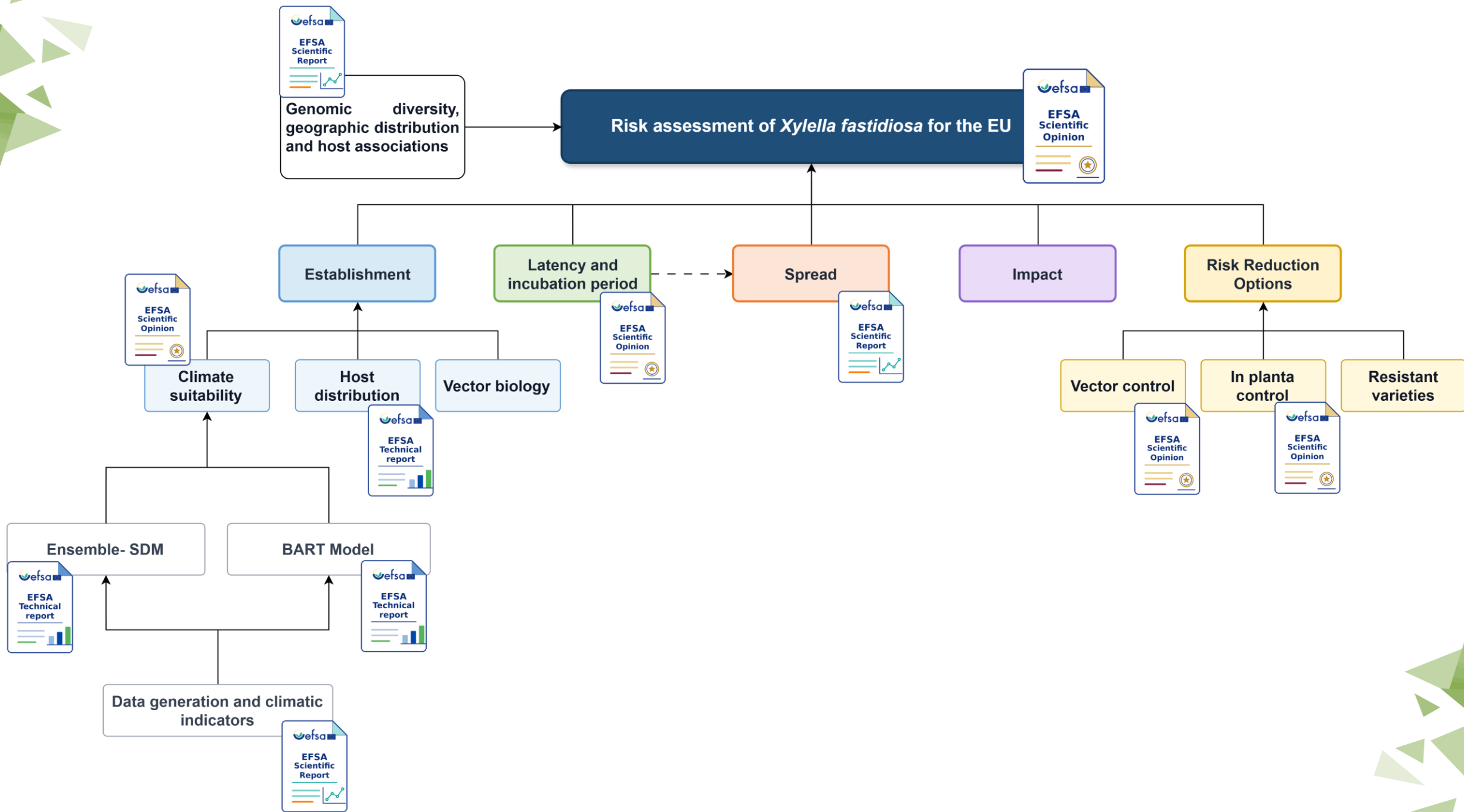
Nicola Tedde

Franco Valentini

Zuzanna Zajac

Claudio Zaza



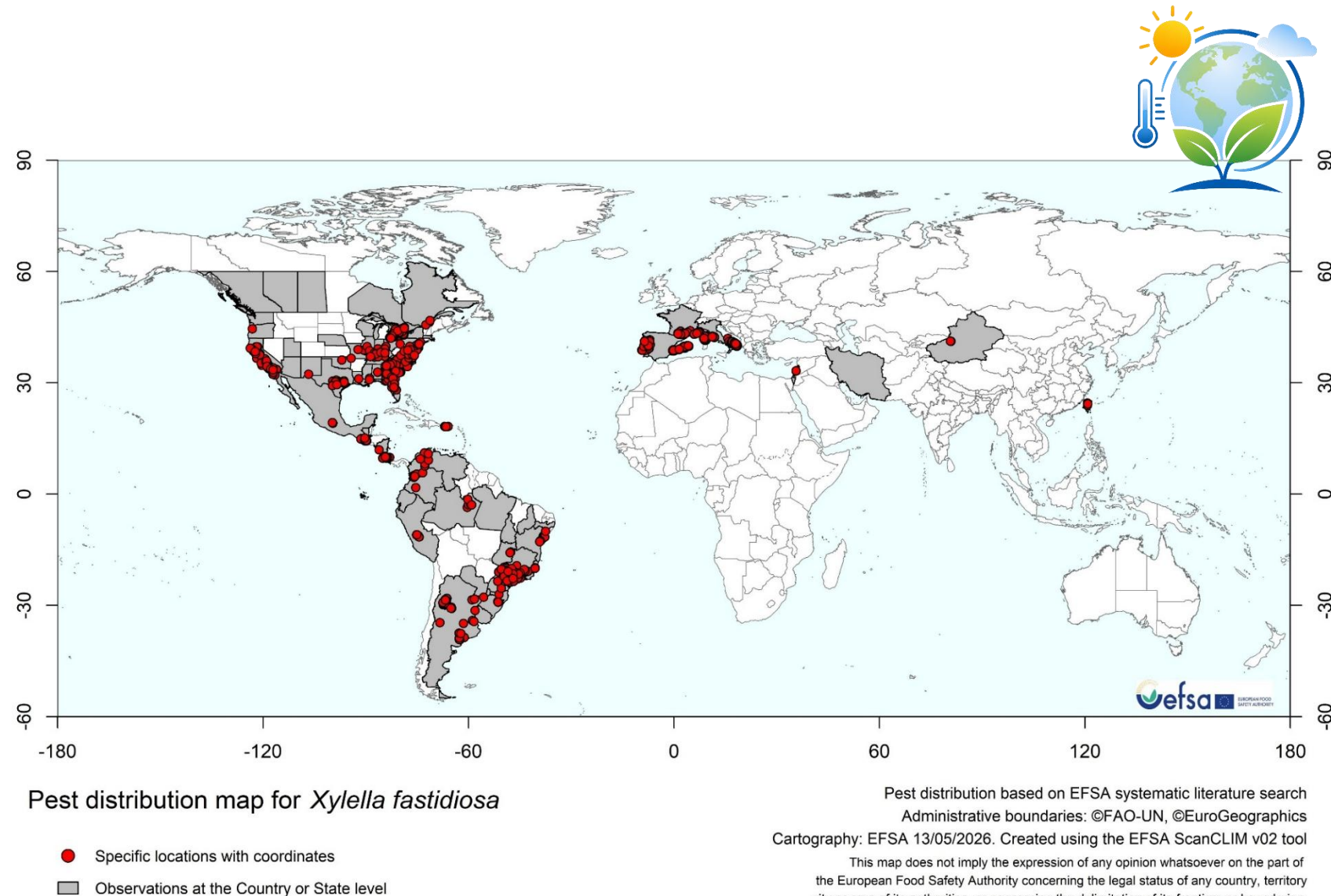


X. fastidiosa occurrence points

36729 observation points
of **outdoor and naturally
infected plant**.
(30770 georeferenced)

Collected from XHPDB,
MS Surveillance and
additional sources (grey
Literature, images...)

To our knowledge, the
**biggest Xylella occurrence
dataset ever built**



EFSA Call for data to support *X. fastidiosa* climate suitability analysis



EUROPEAN FOOD
SAFETY AUTHORITY

EN
English

Menu

Search news, topics, publications, ev...

[Home](#) / [Calls for data](#)

Call for data on: Pest occurrence points of *Xylella fastidiosa* and its subsp. *multiplex*, *fastidiosa* and *pauca* for climate suitability analysis

Published: 22 June 2026 **Deadline:** 26 June 2026 - 23:59 (CEST) **Ongoing**

Share:    

<https://www.efsa.europa.eu/en/calls/data>



EFSA public consultation



A structured process for opening draft scientific outputs to external review.

01 Gather data

Allows academics, NGOs and industry experts to share relevant studies, insights and information.

02 Ensure transparency

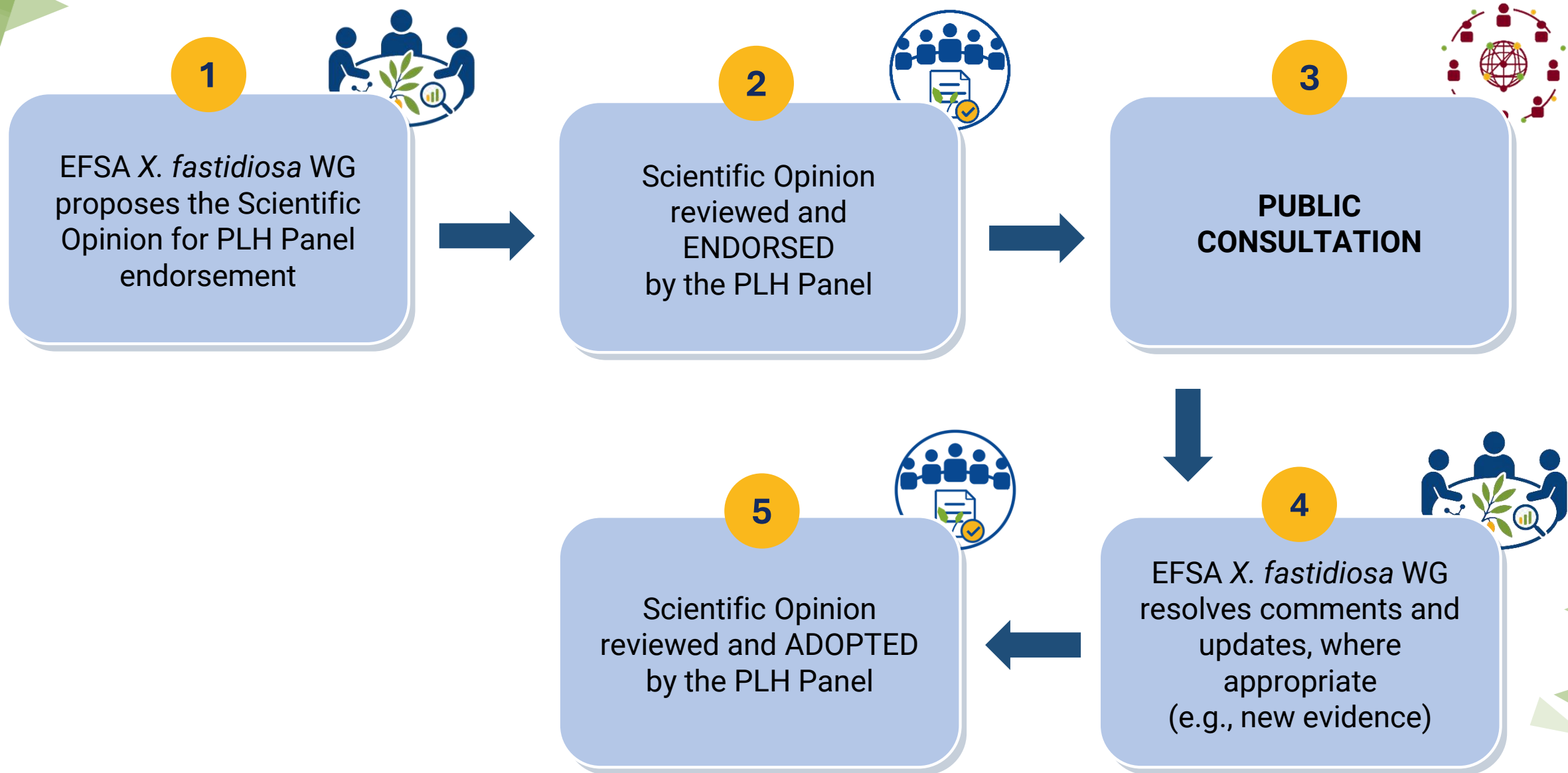
Opens draft evaluations and risk assessments to public scrutiny.

03 Improve quality

Enables EFSA panels to refine guidance, strategies and methodologies based on expert feedback.



The public consultation cycle





Recent public consultations

Draft Opinion & link	EFSA PLH Panel Endorsement	Public consultation Open date	Public consultation Closing date
Public Consultation on Draft scientific opinion on the direct control of insect vectors of <i>Xylella fastidiosa</i>	19/02/2026	03/03/2026	10/04/2026
Public Consultation on Draft scientific opinion on update on in planta control measures and other risk reduction options for <i>Xylella fastidiosa</i>	19/02/2026	03/03/2026	10/04/2026

EFSA Public Consultation guidance on how to contribute: <https://www.efsa.europa.eu/en/calls/consultations>



Public consultation

register and login to save and keep track



By registering to Connect.EFSA you can:

- Ask questions on EFSA's work, on the application process for regulated products, and on career opportunities.
- Submit requests for public access to documents.
- Comment on consultations.
- Create and submit your study notifications to EFSA.
- Prepare and submit a list of intended studies supporting your application and receive renewal pre-submission advice.
- Create and submit your general pre-submission advice requests.

Register below

Already registered? Login [here](#)

*First name

*Last name

*Email

*Affiliation

*In what capacity are you registering?

Next



Upcoming public consultations

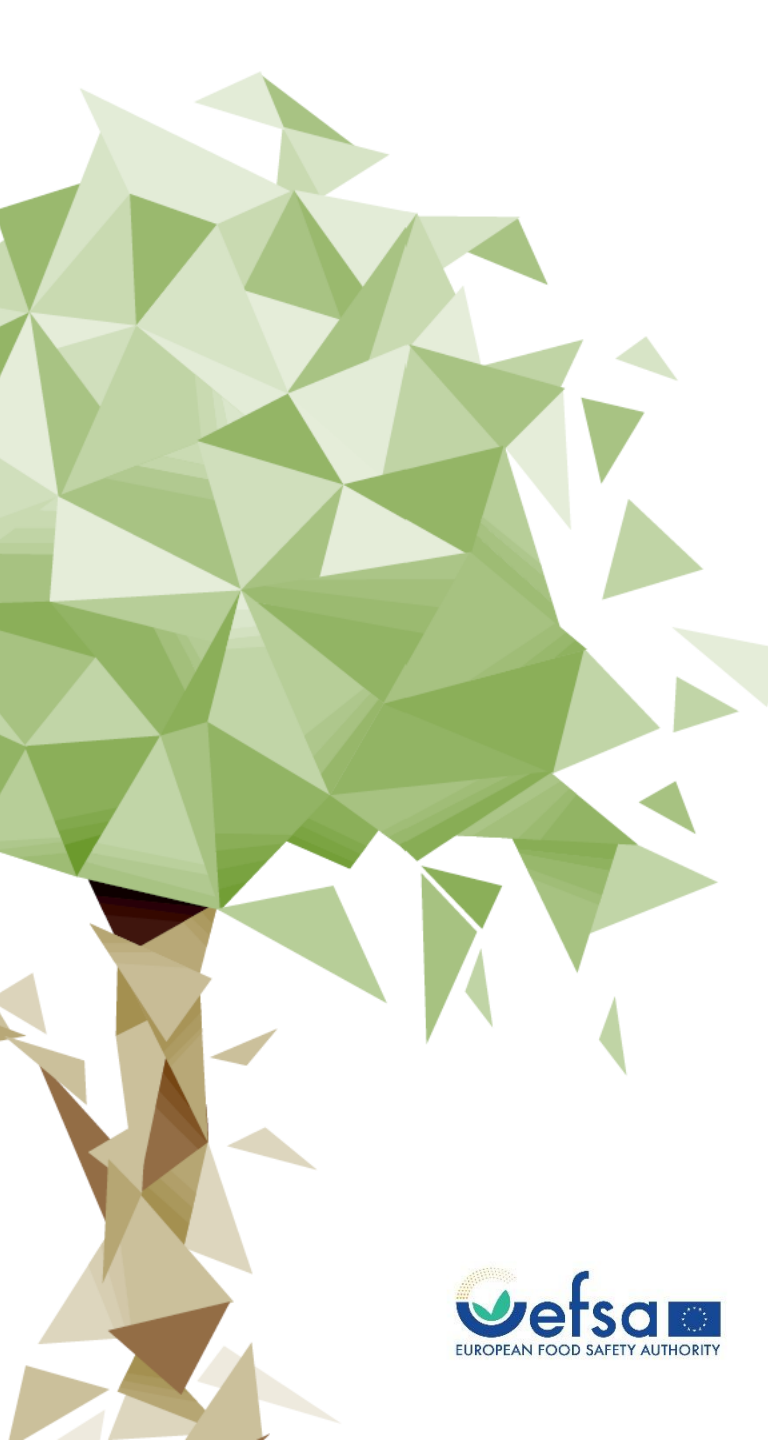
1. Scientific opinion on update on Incubation and latency periods of *Xylella fastidiosa* **[June 2026]**
 2. *Xylella fastidiosa* global pest distribution and climate suitability assessment: methodological framework and evaluation process **[September 2026]**
 3. Bayesian species distribution modelling for *Xylella fastidiosa* and its three major subspecies *fastidiosa*, *multiplex* and *pauca* **[September 2026]**
 4. Ensemble species distribution modelling for *Xylella fastidiosa* and its three major subspecies *fastidiosa*, *multiplex* and *pauca* **[September 2026]**
 5. Scientific opinion on climate suitability for *Xylella fastidiosa* **[September 2026]**
- 



Upcoming public consultations

6. Genetic and genomic diversity, geographic distribution and host plant associations of *Xylella fastidiosa* to support the updated EU risk assessment **[September 2026]**
7. Modelling the spread and control of *Xylella fastidiosa* in the European Union **[September 2026]**
8. Update on the pest risk assessment of *Xylella fastidiosa* **[September 2026]**





Thank you! 😊

Matteo Crotta

matteo.crotta@efsa.europa.eu





Xylella fastidiosa

5th European conference

Bari, Italy | 22-26 June 2026

Feedback from stakeholders: Nine years later

ENA - European Nurserystock Association
Josep M. Pagès.





The European Xylella conferences

A stakeholder view tests whether research is moving towards practical risk reduction

2017

Many basic questions on biology, host plants, vectors, detection and prevention.

2021

Clearer research priorities, but operators still needed deployable tools and species-level guidance.

2026

A much richer knowledge base. The **challenge is now implementation.**

A good scientific result becomes a sector solution only when it is reliable, affordable, scalable and recognised.



What has changed by 2026?

The research base is broad, specialised and increasingly operational

Pathogen genomics

from identification to traceability
strong advance

Surveillance & detection

from outbreak mapping to
structured workflows
strong advance

Host range

from host lists to risk patterns and
cultivar evidence
strong advance

Thermotherapy

from one protocol to species-
specific sanitation logic
Promising (for propagation
nurseries only)

Vector ecology

from presence data to monitoring
and IPM building blocks
promising

Control options

from broad hopes to realistic
assessment
not yet ready

The scientific community has transformed Xylella from a largely unknown threat into one of the best-studied plant health challenges in Europe.



The recurring nursery questions

Four operational needs have remained stable

1

Prevent entry

Reduce the probability that infected material enters production or trade.

2

Detect early

Find infection quickly, before symptoms and before spread.

3

Move safely

Support safe production and movement of plants and propagation material.

4

Manage risk

Use integrated tools where the pathogen or vectors are present.

The question is not only “what is scientifically interesting?” but “what reduces risk without making production impossible?”

One bacterium — millions of risk scenarios

The combinations multiply quickly

Pathogen diversity

subspecies
strains
Sequence Types

Plant diversity

species
cultivars
propagation material

Environment

soil
climate
season
water stress

Vectors & systems

vector species
landscape
production system



subspecies × STs × strains × host species ×
cultivars × material type × edaphoclimatic
conditions × vector ecology × *etc.*

Prioritisation is essential — but it cannot be limited to agricultural crops. Research must also cover the species planted in landscapes, villages and cities across Europe.



Genomics and detection: a major leap forward

From “is it *Xylella*?” to lineage, movement and faster workflows

Genomics

Whole-genome sequencing, MLVA, STs and phage typing are supporting outbreak investigation and traceability.

Surveillance

Large datasets, host databases, trend analysis and genomic surveillance are improving situational awareness.

Detection gap

Laboratory capacity has improved, volatiles detection is promising, but nurseries still need a recognised, affordable field-level screening TOOL.

Better traceability supports proportionate measures — but nurseries need an authority-accepted rapid screening tool to check that plants entering or leaving the nursery are *Xylella*-free.



Host plants and resistance: clearer, but not simpler

Evidence must be precise enough for operators, authorities and trade

- Species-level lists are useful, but cultivar-level behaviour is often what operators need.
- “**Immune**” is clear; “**resistant**” and “**tolerant**” need harmonised definitions.
- Claims should specify subspecies, ST, strain, test conditions and carrier status.
- **Low bacterial load raises a hard question: safe material, acceptable risk, or regulated infection?**

The environmental horticulture sector — ornamentals, forest plants, landscape species — remains a major research challenge.

**This is not research on semantics.
It is the link between regulation
and nursery practice.**





Thermotherapy: the most nursery-specific breakthrough

Moving towards species-specific sanitation logic

- Heat and cold effects on viability
- Hot-water treatment on propagation material
- Species and cultivar tolerance tests
- HWT versus steam treatment comparisons
- Draft standardisation work
- For propagation nurseries ONLY

No universal protocol

- plant species and cultivar
- physiological stage
- cuttings, scions, grafted plants or bare-root plants
- plant survival and marketable quality
- regulatory recognition

The next step is commercial validation: can nurseries apply it, audit it and rely on it?

Vectors and IPM: more practical, still context-specific

From single actions to management packages

Monitoring

Stratified collection, juvenile counts, salivary sheath detection and better sampling thresholds.

Behaviour

Host choice, visual cues, feeding behaviour and seasonal population dynamics.

Biocontrol

Entomopathogenic fungi, predators and antagonists. IPM strategies.



For nurseries, vector management must be feasible, proportionate and compatible with daily crop management.

No cure yet: mitigation is not nursery sanitation

Promising research, cautious expectations

Promising lines

peptides, plant extracts, antagonists, nano-formulations, microbiome-based approaches, inhibitors

Current reality

Some approaches reduce symptoms or bacterial load, but elimination under open-field EU conditions remains unresolved.

Nursery implication

A reduction in symptoms is not the same as clean, certifiable and marketable plant material.

Arrêté du ministre de l'agriculture, de la pêche maritime, du développement rural et des eaux et forêts n°2279-22 du 27 moharrem 1444 (25 août 2022) édictant les mesures de surveillance, de prévention, de contrôle et de lutte contre la bactérie *Xylella fastidiosa*.

LE MINISTRE DE L'AGRICULTURE, DE LA PÊCHE MARITIME, DU DÉVELOPPEMENT RURAL ET DES EAUX ET FORÊTS,

Vu la loi n° 76-17 relative à la protection des végétaux, promulguée par le dahir n° 1-21-66 du 3 hiza 1442 (14 juillet 2021), notamment ses articles 6 et 28 ;

Ces végétaux et produits végétaux doivent, pour leur importation, répondre aux conditions suivantes :

1) provenir d'un pays ayant communiqué au préalable, par écrit, à l'Office national de sécurité sanitaire des produits alimentaires (ONSSA) :

- une déclaration indiquant que la bactérie *Xylella fastidiosa* n'est pas présente sur son territoire ;
- la liste des sites de production desdits végétaux et produits végétaux enregistrés et contrôlés par l'autorité compétente de ce pays pour l'exportation vers le Maroc ;

2) avoir été soumis à l'inspection phytosanitaire visée à l'article 6 du décret précité n° 2-22-243 au poste frontière

Mitigation strategies are highly relevant for affected crops; nurseries need validated sanitation, certification and movement tools.



Regulation and authorisation: science must be usable

New tools need a clear European pathway for recognition

- Plant Health Regulations require nurseries to keep material clean — in practice, below zero % tolerance for regulated pests.
- Several promising tools need authorisation as Plant Protection Products or other regulatory recognition.
- If scientists struggle to explain the route, how can we explain this to nursery operators who must comply with a zero- tolerance for regulated pests?

Risk management must remain science-based.

The EU Regulations must be clear, operational and fully harmonised across the EU, ensuring that Member States do not adopt tailor-made measures that address local problems at the expense of the internal market, legal certainty and mutual trust.



The next phase needs public investment

Many presentations ended with the same message: research must continue

Achieved

A large body of work on crops, especially olive trees, and a much better understanding of genetic diversity, vectors and host response.

Still missing

Nursery-specific validation, commercial-scale protocols, regulatory pathways, cost and logistics assessment.

- More European projects and public funding
- Operational pilots with nurseries and authorities
- Focus on implementation, not only discovery
- Bridge promising science to usable tools



What remains on the ENA research agenda

Convert evidence into safe, recognised and practical protocols

- Operational 'quick' field detection
- Harmonised 'resistance' vocabulary (low bacterial load question)
- Environmental horticulture hosts
- Mitigation in crops vs nurseries' needs
- Science-based Regulations & harmonised implementation across EU
- €€€ Public investment

The measure of success: research outputs that reduce risk while keeping the European nursery sector viable.



From knowledge to implementation

- In 2017, nurseries came looking for answers.
- In 2026, many answers are emerging.
- The challenge now is to make them usable.

Thank you to the European and worldwide research community, and let us continue the journey with the sector. You count on our trust and help.

Josep M. Pagès

ENA - European Nurserystock Association

ena@enaplants.eu





Xylella fastidiosa

5th European conference

Bari, Italy | 22-26 June 2026



REGIONE PUGLIA



Copa and Cogeca

- Copa and Cogeca were founded, respectively, in 1958 and 1959.
- In 1962 a joint Secretariat was established.
- Copa and Cogeca represent over 22 million European farmers and 22 000 agri-food, forestry, and fishery cooperatives.
- The Olive Oil WP includes more than 30 members representing 6 member States (Spain, Italy, Greece, Portugal, France, Croatia)





Impact and Risk Assessment

- **Data analysis:** cross-reference official monitoring data with data reported by operators in order to measure the actual impact on the local area.
 - **Targeted epidemiology:** necessary to distinguish specific subspecies' (pauca, fastidiosa, multiplex) effects in order to assess their different agronomic impacts.
 - Risk of **loss of biodiversity and income** for the farms involved.
- 



Needs

- **Support and compensation:** Technical assistance and equalisation funds are essential to counter the economic damage caused by strict measures, such as planting bans.
 - **Strategic importance of monitoring:** It is vital that regional monitoring is carried out effectively, particularly in the regions closest to Puglia.
 - **Data governance:** Establishment of a steering committee and an Open Data portal to centralise regional monitoring.
 - **Flexible models:** Defining proportionate plant health strategies, overcoming current inflexibilities and adapting interventions to individual local contexts.
- 



THE ROLE OF AGRICULTURAL ORGANIZATIONS AND COOPERATIVES AT THE TERRITORIAL LEVEL

- **Scientific evidence:** Guide new plantings by taking established resistance into account.
 - **Revision of funding schemes:** Optimise funding for replanting by favouring resistant or tolerant cultivars.
 - **Targeted guidelines:** Provide support to local authorities in drawing up funding schemes, adapting the requirements to the planting density and the actual risk in the local context.
- 



Research and development prospects

- **Biotechnology:** authorisation for field trials for new technologies
- **Differentiated approach:** introduce specific distinctions based on subspecies and strain.
- **Scientific rigour:** ending agronomic practices and treatments lacking experimental validation.





Issues relating to the EU regulatory framework

- **European review:** Promote a sustainable, flexible regulatory framework tailored to specific strains of the bacterium and to different regions.
- Moving beyond EU Regulation 1201/2020: Adapt the current legislation to the **advances of the scientific knowledge** on Xylella, as highlighted by the scientific research presented at this conference.





Thank you for your attention!

Dr. Agronomist. Michele Librandi
michele.librandi@gmail.com
www.copa-cogeca.eu





Xylella fastidiosa

5th European conference

Bari, Italy | 22-26 June 2026



REGIONE PUGLIA

INTRODUCTION TO SIDE EVENTS:

- Round table of phytosanitary services at CIHEAM Bari, Valenzano, 25 June 2026 (4 PM)
- Field visits in oliviculture and viticulture, 26 June 2026

Biagio Di Terlizzi, Director CIHEAM Bari

Salvatore Infantino, Head of Regional Plant Health Service, Puglia Region (IT)

Francesco Di Serio, Director IPSP CNR (IT)





REGIONE
PUGLIA



CIHEAM
BARI



RIGENESI

SCIENCE DIPLOMACY & COMMUNICATION FOR
OLIVE SECTOR REGENERATION



rigenesi.iamb.it



Research
Bootcamps



International Scientific and
Institutional Events



Research and
Scientific Reports



2013-2026 Over 12 years of managing the *Xylella fastidiosa* outbreaks: Experiences gained and critical issues emerged

ORGANISERS



25 JUNE
16:00 - 19:30



CIHEAM BARI
Via Ceglie 9, Valenzano (Bari)

PROGRAMME

16:00-16:15 WELCOME ADDRESS

- Francesco Paolicelli - Regional Councillor for Agriculture and Rural Development of the Apulia Region
- Biagio Di Terlizzi - Director, CIHEAM Bari

16:15-16:40 OPENING REMARKS

- Karin Nienstedt - European Commission, DG SANTE, Plant Health Unit
- Giuseppe Stancanelli - European Food Safety Authority (EFSA)

16:40-17:50 CONTRIBUTIONS FROM REPRESENTATIVES OF THE PLANT PROTECTION SERVICES

- Salvatore Infantino - Regional Plant Protection Service, Apulia Region
- Andrea Lenuzza - Regional Plant Protection Service, Tuscany Region
- Alessandra Bianchi - Regional Plant Protection Service, Lazio Region
- Géraldine Anthoine - National Plant Protection Service, France
- Laura Hernandez - National Plant Protection Service, Spain
- Paula Cruz Garcia - National Plant Protection Service, Portugal

17:50-19:00 FEEDBACK FROM STAKEHOLDERS

19:00-19:30 CONCLUDING REMARKS

Orazio Corbo - National Plant Protection Service, Italy

MODERATOR: Donato Boscia - National Research Council of Italy



**Xylella
fastidiosa**

5th European conference

Bari, Italy | 22-26 June 2026

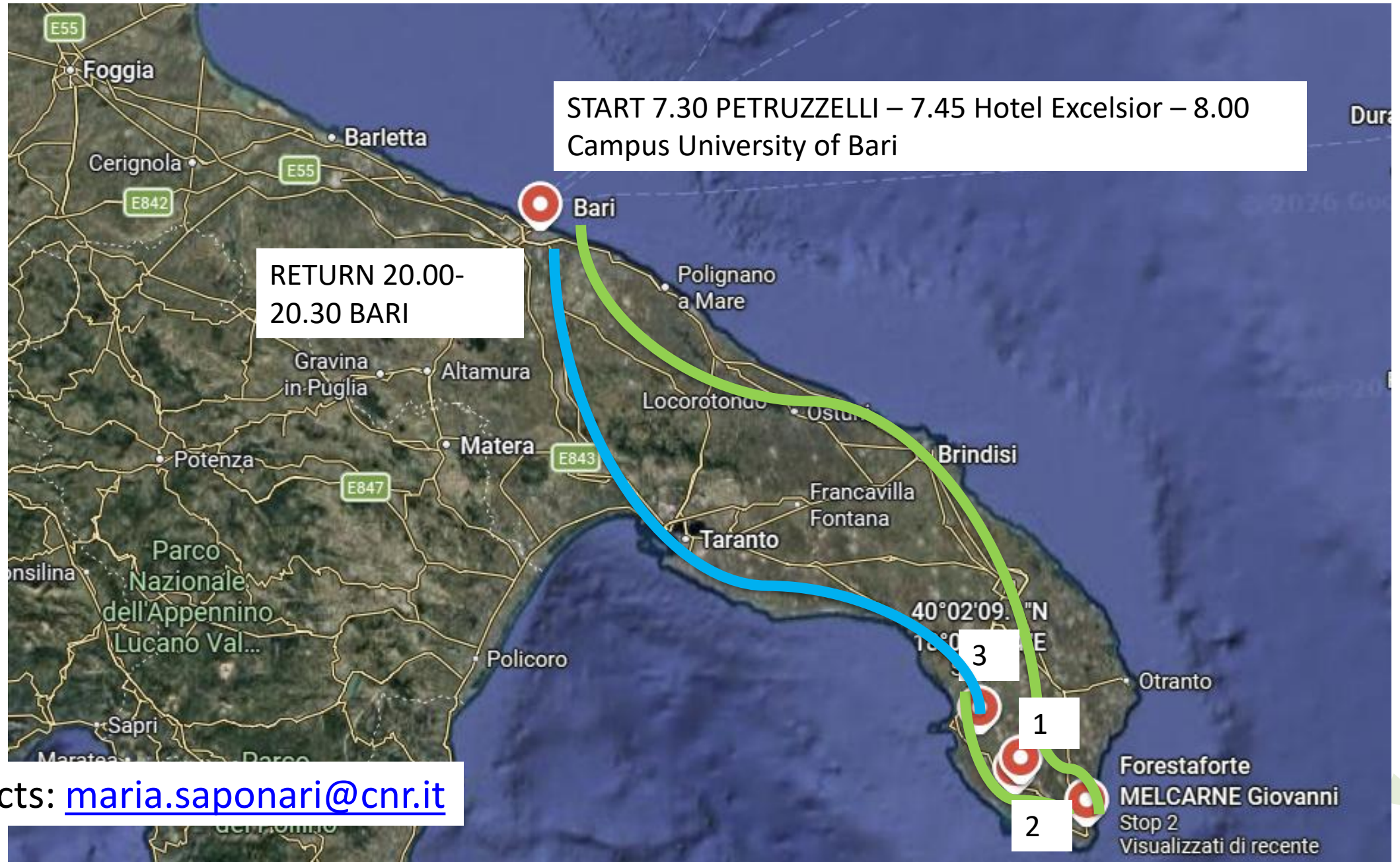


TECHNICAL VISIT – ITINERARY 1



Contacts: donato.boscia@cnr.it

TECHNICAL VISIT – ITINERARY 2





Xylella fastidiosa

5th European conference

Bari, Italy | 22-26 June 2026



REGIONE PUGLIA



SESSION 1| OLIVE RESISTANCE TO *Xylella fastidiosa*

- **Long-term phenotyping is essential:** promising new resistant or tolerant cultivars have been identified, but several additional years of evaluation are required before their performance can be confirmed.
 - **Genetic diversity is the foundation of future breeding:** germplasm collections and diverse progenies must be exploited to broaden resistance beyond the few cultivars currently available.
 - **Omics and biotechnology can accelerate genetic improvement of resistance:** molecular dissection of resistance, combined with genomics-assisted breeding, in vitro regeneration and genome editing, offers a route towards faster development of resistant olive cultivars.
- 



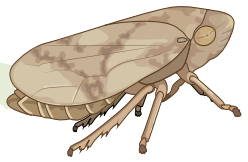
SESSION 2 | ADVANCES ON CONTROL OF *Xylella fastidiosa*

- Control strategies were presented based on microbial biopesticides (individual or in SynComs), antimicrobial peptides, proteins, Zn or Cu based fertilizers, and thermotherapy
 - Some strategies are based on very innovative approaches (aptamers and drug design)
 - Strategies address requirements of environmental safety and sustainability
 - Most strategies combine a direct effect on the pathogen with an indirect effect that induces a host defense response
 - Most of them ask for and need field validation
 - A key challenge is optimizing product formulations to enhance stability and ensure the biosolutions effectively reach *X. fastidiosa* in the plant
 - Knowledge of the mode of action of innovative compounds is crucial either for registration or for environmental impact (i.e toxicity, induction of resistance)
 - New solutions face significant barriers to market entry due to a complex registration process (need of EU-member States discussion to adopt common rules)
- 



SESSION 3 | ADVANCES ON BIOLOGY AND CONTROL OF *Xylella fastidiosa*

- Genome analysis allow us to understand diversity of the pathogen populations to be better prepared for future
 - Winter curing is possible under specific mediterranean climate conditions
 - Uncover the effect on virulence and survival of novel pathogen genes
 - Endophyte microbiome and sap composition can influence the outcome of interactions plant-pathogen in less commonly studied pathosystems
 - Transcriptome and transgenic approaches were used to understand the plant response infection
- 



SESSION 4 | ADVANCES ON VECTORS BIOLOGY AND CONTROL

TOPICS COVERED:

- i) Leveraging prior knowledge for consistent control design: A Meta-Analysis of direct vector control;
- ii) Proactive investigation of *Xylella fastidiosa* transmission biology in emerging areas and by novel vector species in the EU;
- iii) Optimizing agronomic management practices;
- iv) Evaluating efficacy of EPF and RNAi-based approaches for vector control;
- v) Harnessing the virome and insect symbionts for innovative spittlebug management.

The **DISCUSSION** was centered on three main topics: (i) the definition of **THRESHOLDS** for vector control aimed at limiting the spread of the bacterium; (ii) the **SUSTAINABILITY** of the proposed control strategies, with particular emphasis on their **SELECTIVITY** and potential impacts on non-target organisms; and (iii) the extension of **META-ANALYSIS** approaches to address additional, poorly understood components of *Xylella* pathosystems and their management.



KEY MESSAGE: The variable efficacy of conventional control measures in limiting *Xylella fastidiosa* spread highlights the need for innovative and sustainable strategies. Current research is therefore focusing on approaches that interfere with insect–plant interactions to reduce pathogen transmission and disease spread.





SESSION 5 | Impact and social aspects of *Xylella fastidiosa* epidemic and management

- The epidemic has had profound consequences on an already struggling sector with significant structural problems, not just in terms of producers' economic losses but also closures of mills. Replanting strategies are however starting to foster a resurgence of economic activities and offer a renewed prospect for the whole sector.
 - When we talk about olive trees and their value, we are talking of quite different things: an asset, an heritage, and a tourist symbol. Each of these categories should generate specific policies and management strategies.
 - Differentiated forms of human interactions with trees (i.e. abandonment, replanting, and conservation) are not just effects or responses to the epidemic but determine its epidemiology. Understanding the epidemic therefore requires a socio-ecological perspective that accounts for the reciprocal interactions between human practices and ecological processes.
 - Stakeholders have responded in differentiated ways to *Xylella* in different contexts and their attitude toward interventions needs to be further explored. Incorporating these perspectives into policy design is essential for developing effective and socially acceptable strategies.
- 



SESSION 6 | *Monitoring and modelling Xylella fastidiosa* epidemics

- Horizon scanning can identify emerging and unforeseen plant health threats
 - Survey designs for *X. fastidiosa* are harmonized across EU Member States.
 - Surveillance data should be interpreted appropriately to avoid conveying misleading messages
 - Outbreaks of *X. fastidiosa* can exhibit considerable genetic diversity
 - Detection and identification methods for *X. fastidiosa* are continuously evolving and improving
 - Spatial statistics can inform and optimize outbreak management strategies
- 



SESSION 7 | MONITORING AND MODELLING (PART II)

- Successful control hinges on early detection; current protocols may be insufficient in practice
 - Recent promising cases (*Xf* subsp. *fastidiosa* ST1 in Apulia; *Xf* subsp. *multiplex* ST6 in Alicante) show control can work, but both required more aggressive action than minimum from legislation
 - Active research on surveillance and remote sensing aims to overcome cryptic infection and improve early detection
 - Model usefulness depends on matching complexity to available data, ensuring robust parameterisation & decision-making
- 



SESSION 8 | PIERCE'S DISEASE OF GRAPEVINES

- We have to be aware that Xff continues to adapt to environmental conditions challenging risk assessment.
 - Different cultivars and different germplasm respond differently to Xff and can be evaluated with innovative methods
 - Vector control is a key intervention that may be able to be achieved sustainably
 - As the climate gets warmer, the higher the risk of PD in Europe
 - Efforts are made to better understand the biology, ecology, and diversity of Xff
- 



ACKNOWLEDGEMENTS

Scientific Committee:

Rodrigo Almeida, Claude Bragard, Stephane Compant, Daniele Cornara, Nik Cunniffe, Ewelina Czwieniczek, Leonardo De La Fuente, Toufic Elbeaino, Blanca Landa, David Makowski, Maria Saponari, Claudio Sopranzetti, Giuseppe Stancanelli, Antonio Vicent Civera

Organising Committee:

Blanca Landa & Ana Sanchez Montero (Horizon Europe BeXyl project); Michele Digiaro, Biagio Di Terlizzi, Maria Chiara Martelli & Laura Scivetti (CIHEAM Bari); Donato Boscia & Maria Saponari (CNR IPSP); Max Blanck, Ewelina Czwieniczek, Matilde Garcia Gomez, Aurora Murru, Filippo Positano, Virginia Spurio Salvi & Giuseppe Stancanelli (EFSA); Baldissera Giovani (Euphresco III); Salvatore Infantino (Regional Plant Health Service, Puglia Region (IT))





TRANSPORTS ARRANGEMENTS – 25 JUNE

If you are attending the Round Table at CIHEAM:

- Buses to CIHEAM Bari, Via Ceglie 9, Valenzano (BA)
 - Time: 14:30
 - **RETURN at 19:30** with buses to Bari Teatro Petruzzelli & Corso Cavour 205
-

If you are NOT attending the Round Table:

- Buses to Bari Teatro Petruzzelli & Corso Cavour 205
 - Time: 14:30
- 



POST-EVENT

- **Post-event survey** to fill-in by **10 July**
 - **Certificate of Attendance** can be downloaded only after the survey
 - **Presentations** will be available on the Conference website
- 

THANK YOU!



Stay connected

SUBSCRIBE TO

efsa.europa.eu/en/news/newsletters
efsa.europa.eu/en/rss
[Careers.efsa.europa.eu](https://careers.efsa.europa.eu) – job alerts



FOLLOW US ON BLUESKY

[@efsa.bsky.social](https://bsky.app/profile/efsa.bsky.social)
[@efsa-animals.bsky.social](https://bsky.app/profile/efsa-animals.bsky.social) [@efsa-plants.bsky.social](https://bsky.app/profile/efsa-plants.bsky.social)



FOLLOW US ON INSTAGRAM

[@onehealth_eu](https://www.instagram.com/onehealth_eu)



LISTEN TO OUR PODCAST

Science on the Menu – Spotify, Apple Podcast and YouTube



FOLLOW US ON LINKEDIN

[Linkedin.com/company/efsa](https://www.linkedin.com/company/efsa)



CONTACT US

efsa.europa.eu/en/contact/askefsa

