

BEXYL
BEYOND XYLELLA

OEI - Requirement No. 3

Deliverable 11.3

31 August 2025

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DELIVERABLE INFORMATION

Start of the project:	01 Sep 2022
Duration:	48 months
Coordinator:	Blanca B. Landa
Deliverable title:	OEI - Requirement No. 3
Deliverable n°:	D11.3
Nature of the deliverable:	Ethics
Dissemination level:	Sensitive
WP contributing:	WP11
Lead beneficiary:	CSIC
Due date of deliverable:	31 Aug 2025
Actual submission date:	31 Aug 2025

Deliverable status

Ver.	Status	Date	Author(s)
1.0	Final	31 Aug 2025	Blanca B. Landa and Ana Sánchez (P1-CSIC), Maria Saponari (P5-CNR), Jesús Barreiro (P28-JRC), Harry Marshall (P30-FCRA) and María M. López (Ethics Mentor)

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1. INTRODUCTION

All Beneficiaries recognize that all research activities ongoing in BeXyl must comply with ethical principles and relevant national, EU and international legislation regardless of the country in which the research is carried out, including the highest standards of research integrity as set under Horizon Program.

Continuing the series of committed ethical deliverables, this document describes the main ethical issues related to the research activities conducted during the 2nd reporting period. This Deliverable (**Deliverable 11.3**) is the 3rd of the series of Ethics Reports. Detailed information on the ethical dimension of the project is provided in the **Deliverable 11.1 -** OEI - Requirement No. 1 and the activities performed and its evaluation regarding to the 1st reporting period are described in the **Deliverable 11.2 -** OEI - Requirement No. 2.

The External Independent Ethics Advisor, Dr. **Ilja Richard Pavone**, from the 'Interdepartmental Center for research Ethics and Integrity (CID Ethics)' CNR, BioLaw Unit, Italy, reviewed that that the four elements identified by the European Commission were adequately covered during the 1st reporting period.

In addition, within the project the Ethics Mentor, Dr. **María M. López**, made some advises and recommendations to maintain high ethical standards in BeXyl.

All partners have taken these recommendations into account in the course of the 2nd reporting period, as explained throughout this document.

Additionally, the Independent External Ethics Advisor and Ethics Mentor were consulted again when the 2st Reporting Period was close to finish, on the following points:

- Appropriate treatment of **human** participants;
- Appropriate treatment of **animals**;
- Appropriate treatment of **personal data**;
- Appropriate **cooperation with non-EU countries** (materials and data exchanged).
- **Other ethical issues** suggested by the Ethics Advisor and Mentor.

All the recommendations and comments made by the Ethics Advisor and Ethic Mentor for this period are also reflected in the document.

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2. CURRENT ACTIVITIES PERFORMED TO MAINTAIN HIGH ETHICAL STANDARDS IN BEXYL

2.1 Humans (H)

BeXyl consortium must ensure respect for people and for human dignity and fair distribution of the benefits and burden of research. Also, BeXyl consortium must protect the values, rights and interests of the research participants.

The procedures and criteria to identify and recruit research participants have been carried out by means of a quota sampling procedure, accounting for age, sex, and location criteria (rural/urban in the case of citizens and agricultural region in the case of farmers), and farm size in the case of farmers.

During the 2nd Reporting Period, the Human groups involved have been mainly stakeholders:

- First group participating in Interviews and Focus Groups related to **Task 8.2 "Understanding stakeholder knowledge, and attitudes, and the co-design of technology uptake support"**.
- Second group participating at surveys for the **Task 8.4 "Socioeconomic analysis of *Xylella fastidiosa* impacts and adoption of IPM measures"**.

All participants involved in the surveys were required to provide informed consent before participating in interviews or focus groups. Each interviewee signed an informed consent form, available either in English or in the relevant local language. All collected information is anonymized, and results are reported only in an aggregated format, ensuring that individual responses cannot be traced back to participants.

The Forestry Commission Research Agency (P30-FCRA) and the Joint Research Centre (P28-JRC) retain templates of all consent forms used in their respective interviews.

For the interviews conducted under Task 8.2 by P30-FCRA, a tailored consent statement was developed for each case study area. The consent statement used in the second case study area, in Alicante, Spain, is provided in **Annex 1**.

Similarly, for the focus groups, consent forms were specifically adapted to reflect the nature of each target group. The version used in Alicante is included in **Annex 2**.

The interviews planned for Task 8.4 by the P28-JRC are based on a dedicated consent form, which is included in **Annex 3**. All participants involved in the surveys are required to provide informed consent prior to taking part in the experiment. When sensitive information is requested—such as gender, education level, or annual income—participants are always given the option to opt out (e.g., by selecting "prefer not to answer") and/or to skip the question entirely.

2.2 Personal data (POPD)

As discussed in Deliverable 11.2, the activities performed within **WP8 'Ecological, social and economic impacts of *Xf* and outbreak management approaches'** involve the collection of information from farmers/citizens such as age, education, farm size, income, and country, in addition to their attitudes, preferences, and opinion on different aspects to be analysed.

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During the 2nd Reporting period, two tasks from this WP have made use of personal data: **Task 8.2** by P30-FRCA and **Task 8.4** by P28-JRC.

The **Task 8.2** '**Understanding stakeholder knowledge, and attitudes, and the co-design of technology uptake support**' has three phases of data collection:

1. BeXyl stakeholder mapping survey completed during 1st reporting period.
2. Key informant interviews, realized in Cordoba and Alicante for the 2nd reporting period. The consent statement for the first case study conducted in Córdoba, Spain was provided in Deliverable 11.2. The version used for **'Alicante'** case study area is attached in **Annex 1**. Each consent form was adapted to ensure appropriateness for the context (location, type of data collected, participant group).
3. Interviews and Focus groups with Stakeholders in Cordoba and Alicante. Focus groups with a range of Stakeholders identified as being key in the olive or almond value chain: growers and producers of plants (farms, nurseries) and crop processors (cooperatives, industry association representatives, private mills. As example, consent form used for Alicante is available at **Annex 2.**

Personal data are being retained alongside research data and linked solely via a secure and separate cipher code. Also, to remain transparent and compliant, participants are informed about:

- How, when, and where their personal data will be stored.
- Who will access it and for what purpose.
- If and with whom the data will be shared.
- Under what conditions the data will be securely destroyed—either upon participants' request or when it's no longer needed.

The activities planned for '**Task 8.4 Socioeconomic analysis of *Xf* impacts and adoption of IPM measures'** involve the processing of personal data collected through interviews, based on prior informed consent. The template consent form is provided in **Annex 3**. While this task also includes the processing of personal data collected via surveys, no direct identification of data subjects by researchers is required. Therefore, in accordance with Article 11 of Regulation (EU) 2016/679, researchers are not obliged to obtain, retain, or process additional information for the purpose of identifying individuals. As a result, no declaration of compliance or formal authorization was necessary.

The partner P28-JRC obtained ethical clearance for the surveys conducted under WP8 from its internal Ethical Review Board, as part of the broader activities led by the Plant Health Economics Team (Evaluation ID: 32588_1_22, dated 6 June 2023).

The external contractor **VVA Market Research**, which collaborates with P28-JRC, is responsible for providing the questionnaires and document D1 (describing the recruitment and sampling strategy) for review and validation by P28-JRC. All external contractors potentially involved in conducting Task 8.4 will be requested to submit the necessary questionnaires for approval.

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2.3 Animals (A)

Within **WP2 'New strategies and improved methods for surveillance, early detection and monitoring of *X. fastidiosa*'** and specifically in **Task 2.6. Use of canine olfactory detection of *X. fastidiosa* at inspection ports, nursery and field scale and its vectors** BeXyl will explore the use of canine olfactory for *X. fastidiosa* detection.

As it was reported in D11.2, the requirements established in Directive 2010/63/UE which aims to improve the welfare of animals used in scientific procedures has been considered in the research program. Welfare in dog training is ensured together with the Italian National Canine Association (ENCI), avoiding that training techniques may induce fair or pain; conversely, training rely on the reinforcement (reward) of the positive outcomes perceived by the dog, thus punishment is never used, as for our research purpose there is no need to use techniques which impact negatively on the welfare of dogs.

During this 2nd reporting period, the trainers have continued working with the two dogs, **Ellis** – English springer spaniel – pedigree number LO15104180, and **Paco** -Labrador retriever– pedigree number LO19111311. Training activities were all performed in a farm located in the countryside (Az. Agricola Melcarne, Gagliano del Capo, Lecce, Puglia, Italia; A third party partner of the consortium), so that the dogs could work comfortably in large open space in open air.

The training activities have been carried out in open space, not indoor (i.e. inside greenhouses or grow chambers) due to the following reasons:

- The training conditions could be comparable with the real working conditions (i.e. in nurseries, lots of consignments, etc.),
- The training materials could be easily managed (i.e. olive potted plants)
- Space and environment would be more favourable for the dogs.

The need to work in open space implied the organization of the working sessions in the infected area of Apulia (Italy), where there are no mandatory actions for the removal of the infected plant materials. Potted infected plants were therefore used and moved outside the greenhouse for the time being the training session. However, under this condition we could only work with the plants infected by the same strain occurring in this demarcated area of Apulia; i.e., plants infected by bacterial isolates belonging to *X. fastidiosa* subsp. *pauca* ST53.

The training materials included potted olive plants that were not threatened/sprayed with insecticides/pesticides for the whole cycle of cultivation. Sessions included lines of 5 to maximum 10 plants, including one or more plants infected with *X. fastidiosa* subsp. *pauca* ST53.

Before starting each session, the dogs were allowed to move for few minutes to allow them to perform their physiological needs. Then each session Then each session included from minimum of 2 to maximum 5 passages on the rows containing the target plants (from 5 to 10 plants), with each passage lasting approx. 1 min. and the whole session lasting max 5 minutes. Between sessions the dogs were allowed to rest for at least 40 minutes, during which the dogs were rested in their kennel, with water available.

Generally, only one training session (corresponding to several passages on the row of plants) was organized per day. However, in some cases, two sessions were performed: one in the morning the second in the afternoon after a break for the resting.

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After the session, the dog was moved in its kennel and relaxing environment watched by the dog's trainer, who observes how the dog behaves (seeks cuddles or quiet play eats or drinks calmly) and offers a gentle walk, chewing (chew toys, deer antlers, Kongs with food) and calming touch or massage.

Training sessions included at least 2 dog trainers, because the work is carried out with blind plants for the dog's trainer, and so one of the trainers prepares the rows of the plants, while the second guides the dog.

In **Deliverable D11.1**, the training protocol was described in detail. The training involves positive training approaches, based on rewards and clickers. When the dog correctly identified the target olive plant, he was rewarded with food, toy (ball, tug) and a play session with their handler. Through training, the dogs learnt passive indication behaviour, stopping and sitting near the target potted plant, without coming into deep contact with the soil or the plant foliage.

At the links below, there are examples of training sessions:

https://drive.google.com/file/d/1oX5m2DijbkRwyZv7OzRZG-RcwmkSPLbj/view?usp=sharing

https://saco.csic.es/s/H9JpXSfo5tfqBD5

https://saco.csic.es/s/occQcgjJiajb8Z6

https://saco.csic.es/s/W5MDtsAmnT4NtHe

2.4 Non-EU Countries (NEC)

Exchange of material among BeXyl partners including non-EU countries

As it was explained on D11.2 The Regulation (EU) 2016/2031 and Commission Delegated Regulation (EU) 2019/829 and its different updates) on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community allow introduction and manipulation of *X. fastidiosa* for scientific purposes and to set experimental trials (official testing, scientific or educational purposes, trials, varietal selections, or breeding).

To this end, Scientific Institutions have to be authorized by their respective National Phytosanitary Authorities and have to operate in accordance with the containment guidelines. Exchanges of cultures of the harmful organism *X. fastidiosa* or *X. fastidiosa*-infected material between scientific institutions have been done upon obtaining the Letter of Authority (LoA) signed by the Phytosanitary Authorities of the countries exporting/importing the harmful pathogen.

During the second reporting period, exchanges of infectious materials (live bacterial cells in axenic cultures or *X. fastidiosa*-infected plant materials, or live insect specimens) from non-EU countries to the EU or vice versa, or between EU Member States, have taken place. As already indicated in the first report, all partners receiving live bacterial cultures or infectious material have facilities that have been designated as quarantine facilities or have permits to work with such material and have requested and obtained the LoA to import such materials.

Outside the EU regulations on the possession and handling of quarantine plant pathogens (Regulation (EU) 2016/2031 and Commission Delegated Regulation (EU) 2019/829) there was also exchange of non-infectious DNA preparations and live and frozen non-infective *X. fastidiosa* insect vectors or heat-killed *X. fastidiosa* cells.

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During this second reporting period, some partners located in the Americas have conducted laboratory and field experiments using *X. fastidiosa* strains and host plant cultivars (most of which are not common in the EU) indigenous to their respective regions, allowing them to gather much more complete molecular/biological information on the complex interactions between *X. fastidiosa*, the host and the environment. Additionally, a partner from the US have used European strains for their laboratory and greenhouse experiments.

Finally, there have also been exchanges of plant materials within the EU that comply with the official Plant Passport mark, to allow their introduction and movement through protected zones, the purpose of which is to demonstrate that this consignment is free from quarantine pests and meets the required tolerance levels for regulated non-quarantine pests.

Detailed information of the different types of material including *X. fastidiosa* strains, insect vectors, plant material and plants for planting that have been exchanged within BeXyl project during the second reporting period is provided in **Annex 4**. A summary of these interchanges is shown at **Table 1** (55 interchanges).

Table 1. Summary of all the types of material interchanged within BeXyl project

Nº IC	Type of material	Origin	Destination	Permit required
14	*Xylella fastidiosa* strains	EU	EU	Yes
4	*X. fastidiosa* strains	Non-EU	EU	Yes
2	*X. fastidiosa* strains	EU	Non-EU	Yes
6	Plant samples (Potentially infected by *X. fastidiosa*)	EU	EU	Yes
2	Plant samples (non-infected by *X. fastidiosa*)	EU	Non-EU	No
5	Plant Samples (non-infected by *X. fastidiosa*)	EU	EU	No
3	Plant extracts (Potentially infected by *X. fastidiosa* but with cells dead)	EU	EU	No
5	Non-infective vector samples	EU	EU	No
2	Plants for planting	EU	EU	Yes
2	Plants for planting inoculated with SynComs	EU	EU	No
7	Plant DNA samples	EU	EU	No
2	Bacterial strains	EU	EU	No
1	Protein lysates of *X. fastidiosa* strains	EU	Non-EU	No

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All the exchanges of infectious or non-infectious material among BeXyl partners and within this reporting period have been properly documented, the correspondence and files are kept in a dedicated directory of the BeXyl shared folder, and available for any verification by the competent Plant Health Authority.

2.5 Other ethical issues reported by the Ethics mentor and Ethics advisor

2.5.1 Quality management System (QMS)

Adherence to good research practices supports the verification of data quality and integrity, fosters transparency in evaluation, and ultimately contributes to improved research outcomes.

In response to the ethics advisors' recommendation to assess the presence of a Quality Management System (QMS), the consortium partners were consulted. The general consensus was that most institutions do not operate under a formal QMS, primarily due to the highly diverse nature of the research processes they manage. Nevertheless, many partners reported the existence of institutional codes of good research practice, which serve as the foundational framework guiding their research activities.

Several consortium partners have institutional frameworks and codes that support quality assurance and uphold research integrity, even in the absence of a formal Quality Management System (QMS). These frameworks guide good research practices throughout the research lifecycle. Examples include:

- P1-CSIC (Coordinator): P1-CSIC has established a Code of Scientific Practices (www.csic.es/sites/default/files/2023-01/cbpc_csic2021.pdf; available in Spanish and English). This code emphasizes that research staff must uphold and promote responsible research conduct—characterized by integrity, quality, and rigour—through all stages of research (proposal, execution, dissemination, and evaluation). It also reinforces the importance of compliance with applicable regulations and consideration of ethical issues.
- P3-UCO (University of Córdoba): The P3-UCO has adopted a Code of Responsible Practices and Integrity in Research (BOUCO 2015/00559). This code focuses on research conduct rather than on the selection of research topics, methodologies, or theoretical frameworks. It provides guidance to ensure integrity and ethical behaviour in all aspects of research execution.
- P8-INRAE (Institut National de Recherche pour l'Agriculture, l'Alimentation et l'Environnement) does not have any quality certification, but it follows a quality politics that is available here: https://www.inrae.fr/actualites/politique-qualite-inrae-2023-2027
- P28-JRC (Joint Research Centre): The P28-JRC operates an Integrated Management System (JRC-IMS), which incorporates the Internal Control Framework and harmonizes requirements from various ISO standards. It also accounts for site-specific regulatory requirements (national, regional, and local). The JRC-IMS is structured around three types of processes: i) management processes; ii) scientific and technical support processes; and

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iii) support processes (infrastructure and services). While the IMS documentation is for internal use only and not publicly available, it provides a well-defined procedural foundation for quality assurance and operational consistency across the organization.

2.5.2 Biosecurity and Biocontainment

All activities involving *Xylella fastidiosa* in the BeXyl project are conducted in full compliance with the highest standards of **biosecurity, biosafety, and biocontainment**, as required for working with a regulated quarantine plant pathogen. Given the significant risks posed by *X. fastidiosa* to agriculture, biodiversity, and trade, a strict and well-documented framework governs any manipulation of live bacterial cultures, infected plant material, or experimental vectors.

Quarantine Facilities and Research Permits

All partners working with viable *X. fastidiosa* cells or *in planta* material operate under an exempted research allowance, as authorized by their respective **National Plant Protection Organizations (NPPOs)**. These permits are granted under strict conditions that limit experimentation to **certified quarantine facilities** specifically approved for working with *X. fastidiosa*. The facilities are designed to meet containment requirements equivalent to **Biosafety Level 2 (BSL-2)** or higher and are subject to **inspection and recertification** by competent authorities according to their specific rules.

These laboratories are equipped with:

- Physical and procedural barriers to prevent unintentional release (e.g. double-door entry, air filtration HEPA systems, negative pressure, etc.)
- Secure access control (e.g. restricted key cards, visitor logs)
- Decontamination equipment (autoclaves, disinfectants)
- Specific protocols for storage, transport, and disposal of infected material

A comprehensive **Risk Mitigation Plan** has been developed and implemented to align with national and EU legislation. This plan addresses not only containment procedures but also emergency protocols, incident reporting mechanisms, and ongoing risk assessments.

Applicable Laws and Regulations

The following European and national regulations govern work with *X. fastidiosa* and are strictly adhered to by all participating institutions:

- **Regulation (EU) 2016/2031** on protective measures against plant pests, which establishes the legal basis for containment and control of *X. fastidiosa* in the EU.
- **Commission Implementing Regulation (EU) 2020/1201**, which defines specific measures for the movement and handling of host plants, plant products, and vectors associated with *X. fastidiosa*.
- **Commission Delegated Regulation (EU) 2019/829** supplementing Regulation (EU) 2016/2031 of the European Parliament and of the Council on protective measures against

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pests of plants, authorising Member States to provide for temporary derogations in view of official testing, scientific or educational purposes, trials, varietal selections, or breeding

- **Directive 2000/54/EC** on the protection of workers from risks related to biological agents, ensuring safe laboratory practices and occupational health standards.
- National quarantine and biosafety regulations applicable in each partner country which include requirements for facility registration, personnel certification, and pathogen tracking.

Additionally, the research is designed in accordance with the **EPPO (**European and Mediterranean Plant Protection Organization) and the **ISPM** (International Standards for Phytosanitary Measures) Standards including:

- PM 5 – Pest Risk Analysis: e.g., PM 5/1(1), PM 5/3(5)
- ISPM 11 - Pest risk analysis for quarantine pests
- PM 3 Phytosanitary procedures: e.g. PM 3/64(1), PM 3/66(1), PM 3/81(3), PM 3/82(3)

Institutional Oversight and Training

Each partner institution involved in quarantine-level work with *X. fastidiosa* has designated **biosafety officers** or equivalent roles responsible for overseeing compliance with regulatory requirements and internal biosafety policies. All personnel involved in handling the pathogen or infected materials receive mandatory training in:

- Biosafety procedures and personal protective equipment (PPE)
- Emergency response and incident containment
- Waste decontamination and sample transport protocols
- Ethical considerations related to dual-use research and public safety

In most institutions training records are maintained and audited as part of internal quality control systems, and updated refresher courses are offered annually or as regulations evolve.

Field Work and Vector Studies

No BeXyl partners are conducting work with **viruliferous insect vectors** (i.e., insect carriers of *X. fastidiosa*) inside quarantine facilities. All such experiments are carried out **exclusively in demarcated infected zones** where *X. fastidiosa* is already established and where vector research is legally permitted.

These field studies are conducted in coordination with **national surveillance and containment programs**, ensuring that vector monitoring, transmission studies, or biological control trials are integrated into existing phytosanitary frameworks. Research teams are required to report findings, ensure controlled handling of insect populations, and avoid any action that could increase disease spread.

Data and Documentation Transparency

All institutions handling *X. fastidiosa* maintain detailed logs of:

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- Pathogen acquisition and use (including strain source and passage history)
- Biosafety incidents or near misses
- Waste disposal and decontamination procedures
- Internal audits and inspections

This documentation ensures **traceability**, **accountability**, and **transparency**, and it may be made available to regulators or auditors upon request.

Continuous Risk Assessment and Adaptation

As part of BeXyl's commitment to responsible research, the consortium promotes a **biosafety culture** where risk assessment is not treated as a static exercise. Instead, procedures are regularly re-evaluated in response to:

- Emerging knowledge about *X. fastidiosa* or its vectors
- Changes in facility infrastructure or personnel
- Shifts in national or EU regulations
- Ethical feedback or external review recommendations

This dynamic approach ensures that biosecurity and biocontainment practices remain robust, effective, and compliant throughout the lifespan of the project.

2.5.3 Environmental protection and biodiversity

Environmental protection and the preservation of biodiversity are core ethical commitments of the BeXyl project. These principles are aligned with the Sustainability Plan of the Spanish National Research Council (P1-CSIC)—the coordinating institution of the project—which outlines strategic goals to reduce the environmental impact of research activities, promote energy efficiency, and foster responsible resource use. This plan is publicly available at: http://csic.es/sites/default/files/Plan-Sostenibilidad-%20CSIC-VF.pdf.

At the institutional level, the Institute for Sustainable Agriculture (IAS-CSIC) actively promotes sustainable research practices through its dedicated Sustainability Committee. This committee supervises and encourages the adoption of environmentally responsible measures in both scientific and operational workflows. Initiatives include waste reduction and recycling, water and energy use monitoring, and the implementation of sustainable field and laboratory practices.

The Institut National de Recherche pour l'Agriculture, l'Alimentation et l'Environnement (P8-INRAE) undertakes various actions to limit impact on the environment that are publish on the corporate social responsibility: https://www.inrae.fr/en/corporate-social-responsibility-inrae

Moreover, BeXyl activities that involve field surveys, microbial sampling, and plant material collection are designed to minimize ecological disturbance. Sampling protocols are developed following local, national, and EU biodiversity protection regulations, ensuring that native flora and fauna are not adversely affected. When possible, non-destructive sampling methods are prioritized.

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The project also recognizes that research on *Xylella fastidiosa*, a quarantine pathogen, must consider not only disease management but also the ecological impacts of control strategies. Therefore, potential interventions derived from project findings will be evaluated not only for efficacy but also for their sustainability and compatibility with ecosystem preservation.

In line with reducing the project's environmental footprint, partners are encouraged to hold online meetings whenever feasible, especially to avoid unnecessary air travel. All project materials and documentation are distributed in digital format, and no printed information is provided to partners. Additionally, during in-person meetings, efforts are made to minimize the use of plastic by providing recycled paper credentials, encouraging refillable water bottles, and avoiding single-use plastics.

BeXyl partners are committed to continuously improving their environmental performance through internal awareness campaigns, training in good environmental practices, and the integration of sustainability metrics into research planning and evaluation.

2.5.4 Compliance with Biosecurity Regulations and Ethical Standards in Plant Health Emergencies

The topic of the BeXyl project call addresses high-priority and quarantine plant pests within the European Union, including *Xylella fastidiosa*, which is regulated under Regulation (EU) 2016/2031 on protective measures against pests of plants, and its associated Commission Implementing Regulation (EU) 2019/1702, which establishes the list of Union quarantine pests.

In addition to complying with all biosecurity provisions set out in this legal framework, the BeXyl project also adheres to ethical principles for plant health emergencies, as outlined by the International Society for Plant Pathology (ISPP). This code of ethics promotes a proactive, transparent, and collaborative approach when dealing with emerging plant disease threats.

BeXyl partners endorse and apply the ISPP's five standards of ethical practice:

- Alert authorities and colleagues of new outbreaks as early as possible;
- Honestly and accurately report all relevant information, including uncertainties;
- Openly share biomaterials and data in a timely and responsible manner;
- Collaborate with experts across relevant disciplines and sectors;
- Respect and acknowledge the work of other scientists and contributors.

These principles support the integrity of the project's response to X. fastidiosa outbreaks and ensure responsible communication and collaboration with national authorities, international networks, and the scientific community.

Together, these commitments—legal and ethical—ensure that the BeXyl project not only complies with binding EU regulations but also upholds best practices in crisis response, scientific transparency, and professional conduct in the face of plant health emergencies.

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3. EVALUATION OF THE ACTIVITIES PERFORMED TO MAINTAIN HIGH ETHICAL STANDARDS IN BEXYL BY THE ETHICS MENTOR (Dr. MARÍA M. LÓPEZ)

This document describes the main ethical issues related to the research activities conducted during the 2nd reporting period. Detailed information on the ethical dimension of the project is provided in the Deliverable 11.1 - OEI - Requirement No. 1 and the activities performed and its evaluation regarding to the 1st reporting period were described in the Deliverable 11.2 - OEI - Requirement No. 2.

The involvement of an Ethics Mentor, with appropriate expertise in ethics of new and emerging technologies is required for research projects which may raise significant ethics risks. Here, as Independent External Ethics Mentor, Dr. M. López was committed to advice and monitor, from her experience and ethical training, whether the project activities in the 2nd reporting period are in compliance with the highest standards of research ethics and integrity, as well as with EU (Horizon Europe regulation 2021/695), national and international laws. The information provided below is a verbatim copy of what was submitted by the External Mentor Dr. M. López.

3.1 Comments on the activities performed

To maintain high ethical standards in the BeXyl project this report includes, among other, comments to the following points related to the point 3 of the OEI - Requirement No. 2 Deliverable 11 of the project:

3.1.1 Humans (H)

As indicated in the previous report of Deliverable 11.2, the Human groups involved in the project were divided into:

- Partners from the consortium
- Stakeholders participating in interviews and Focus Groups.

As indicated also in the first report, legal entities participating in this Project as partners of the consortium have obtained all approvals documents from the respective national, local ethics committees or other bodies, before the start of the project and there is no new information about changes in the partners or in their activities.
Stakeholders have been requested to give informed consent but results are only reported in an aggregated manner. There are no new comments, as the aggregated manner is enough for the objectives of the project and because Forestry Commission Research Agency (FCRA) retains templates of all consent forms. It is indicated that for Focus Groups consent final form is still under definition to prepare it with more precision depending on the nature of the target group.

During the 2nd Reporting Period, the Human groups involved have been mainly two groups of stakeholders: One group participating in Interviews and Focus Groups related to Task 8.2 “Understanding stakeholder knowledge, and attitudes, and the co-design of technology

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uptake support" and another group participating at surveys for the Task 8.4 "Socioeconomic analysis of *Xylella fastidiosa* impacts and adoption of IPM measures".

The participants involved in the surveys were required to provide informed consent before participating in interviews or focus groups, information was anonymized, and results were reported only in an aggregated format. The Forestry Commission Research Agency (P30-FCRA) and the Joint Research Centre (P28-JRC) retain templates of all consent forms. The consent statement used in the second case study area, Alicante, provided in Annex 1 is appropriate. Similarly, for the focus groups, consent forms were specifically adapted to reflect the nature of each target group. The version shown in Annex 2 is also appropriate.

The interviews planned for Task 8.4 by the P28-JRC are based on a dedicated consent form, which is included in Annex 3 and the provided information is also considered appropriate.

As far as this mentor knows, no claim from the partners, stakeholders or the Commission has been presented.

3.1.2 Personal data (POPD)

In line with the General Data Protection Regulations in the EU, measures and protocols were taken in the first period to prevent unauthorised access and processing of any data collected. These measures will ensure that participants are neither harmed nor disadvantaged and Partner 30 (FCRA) was registered as a data controller.

During the 2nd Reporting period, two tasks from WP 8 have made use of personal data: Task 8.2 by P30-FRCA and Task 8.4 by P28-JRC. The task 8.2 involves the collection of information from farmers/citizens to know their attitudes, preferences, and opinion on different aspects. Regarding to the interviews and Focus groups with stakeholders that were identified as key in the olive or almond value chain, consent form has now been completed, based on the form supplied in Annex 1 of OEI – requirement 1 (Deliverable 11.1) document. There are three phases of data collection: The first one was finished in the previous period. In the 2nd reporting period, key informant interviews, were realized in Cordoba and Alicante, and extract from the survey consent used for Alicante case study area is attached in Annex 1. Each consent form was adapted to ensure appropriateness for the context (location, type of data collected, participant group). Consent statement for interviews is available at Annex 2. Information about the storage of personal data, (who can access them, when is possible to sharing them, and conditions for destroying them) is also provided and considered appropriate.

The activities planned for Task 8.4 involve the processing of personal data collected through interviews, based on prior informed consent. The template consent form is provided in Annex 3 and it is appropriate. While this task also includes the processing of personal data collected via surveys, no direct identification of data subjects by researchers was required and no declaration of compliance or formal authorization was necessary.

As far as this mentor knows, no claim any of the partners, stakeholders or the Commission related to personal data has been presented.

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3.1.3 Animals (A)

Within WP2 'New strategies and improved methods for surveillance, early detection and monitoring of *X. fastidiosa*' and specifically in Task 2.6. 'Use of canine olfactory detection of *X. fastidiosa* at inspection ports, nursery and field scale and its vectors', BeXyl is exploring the efficiency of canine olfactory for *X. fastidiosa* detection. Welfare in dog training is ensured together with the Italian National Canine Association (ENCI), avoiding that training techniques may induce fair or pain or techniques which impact negatively on the welfare of dogs.

During this second reporting period, the same two dogs, Ellis and Paco used in the 1st reporting period were all trained in the same farm in the open air and with the same protocol and trainers, so they have now good experience. The need to work in open space implied the organization of the working sessions in the area with infected olive plants in Apulia (Italy). The training materials, were potted olive plants, for the whole cycle of cultivation. Sessions included lines of 5 to maximum 10 plants, including one or more plants infected with *X. fastidiosa* subsp. *pauca* ST53.

In Deliverable D11.1, the training protocol was described in detail. It is well observed in the videos provided that the methodology looks friendly with the dogs and it was possible to obtain good results of detection. The positive training approaches, based on rewards and clickers and the rewards of food, toys and play sessions with their handler look also very appropriate. After each session, the dog was moved in its kennel and relaxing environment watched by the dog's trainer. According with the expert trainers the dogs do not show symptoms of stress or abnormal behaves.

All the questions indicated in the previous report have been satisfactory answered and consequently there are no new remarks about the methodology utilised for this sensitive canine diagnostic method.

3.1.4 Non-EU Countries (NEC)

In the Deliverable 11.3 of the project there were 55 exchanges of different types of infected and non-infected biological material for which details are shown in Annex 4.

The exchanges of different types of material were considered necessary during the project implementation for reaching some milestones. The detailed information of the 55 exchanges performed during this period justify that they are required for different assays. They include different types of material: 20 exchanges of *X. fastidiosa* strains, 5 of non-infective insect vectors, 2 plants inoculated with SynComs, artificially assembled microbial communities, 18 plant material and plants for planting or extracts from plants, 7 DNA plant samples, 2 bacterial strains and 1 protein lysate, that have been exchanged during this second reporting period. Annex 4 and the summary shown at Table 1 are both very clear.

All of the exchanges have followed the EU legislation about the possession and handling of quarantine plant pathogens (Regulation (EU) 2016/2031 and Commission Delegated Regulation (EU) 2019/829). As in the previous report it is indicated that they were properly documented, correspondence and files are kept in a dedicated directory of the BeXyl portal. Partners receiving living bacterial cells or infectious material have previously confirmed they have working facilities in use that have been approved as quarantine facilities for the National Plant Protection Organizations and have requested and obtained the LoA to import such

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materials. For field experiments carried out in several EU countries plants with the Phytosanitary Passport, were used. Outside the EU regulations on the possession and handling of quarantine plant pathogens there was also exchange of non-infectious DNA preparations and live and frozen non-infective *X. fastidiosa* insect vectors or heat-killed *X. fastidiosa* cells and protein lysates.

3.1.5 Information of EU authorities about new outbreaks

Two new reports are available. The first one is related to the updated in spring 2025 the map of *X. fastidiosa* infected areas in Apulia (Italy) by the EU. The second one is about a new detection of *X. fastidiosa* in Spain in Extremadura region.

The European Commission published a draft regulation adding new municipalities to the Apulia containment zone for *X. fastidiosa*. The regulation follows Italy's notification that the eradication of the plant pathogen in the municipalities of Alberobello, Castellana Grotte, Monopoli, Polignano a Mare and Putignano in the province of Bari and in the municipality of Fasano in the province of Taranto is no longer possible. The EU countries Member states discussed the text at the Plant Health Committee and, the regulation was approved, and the municipalities mentioned will be added to the respective list of infected zones under containment concerning the provinces of Taranto and Bari.

In early July 2025, the Plant Health Service of the Region of Extremadura (Spain) reported the presence of *X. fastidiosa* subspecies *fastidiosa*, in a wooded area of Valencia de Alcántara, close to the border with Portugal and activated one eradication programme. Following the contingency plan, the authorities have established infected and buffer zones and detected the pathogen on five plants in a forested area. The infected plants were: two rockroses *(Cistus sp*.), a common broom (*Cystisus scoparius*), a black broom (*Cytisus villosus*), and a Spanish lavender (*Lavandula stoechas*). So far, no infections have been detected in olive and oak trees in Extremadura. The surveillance and prevention measures implemented after the last detections in Portugal were key to allowing this rapid response in the Spanish.

Regarding this topic, no specific recommendations are made in this report because in both cases there is abundant EU legislation that must be strictly complied with, as has been done according to the received information. In addition to the biosecurity provisions foreseen in the legislation, BeXyl also observes the code of ethics for plant emergencies proposed by the International Society of Plant Pathology (ISPP) following its five standards of practice: i) alert authorities and colleagues of new outbreaks; ii) honestly and accurately report information; iii) openly share biomaterial and data; iv) collaborate with experts on the problem; and v) respect and acknowledge the work of other scientists. The two notifications were correctly performed according to the Annex I of the Commission Implementing Regulation (EU) 2019/1715.

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3.2 Further advice and recommendation to maintain high ethical standards in BeXyl

3.2.1 Humans (H)

Excellence and professional ethics in research is based on partners with intellectual honesty and professional integrity. It includes the way to plan and conduct research, how results are recorded and reported, and how the results from research are disseminated, and applied. The following advices and recommendations are indicated for their evaluation by the respective responsible persons.

Good research practice will allow verification of the quality and integrity of research data, provide a transparent basis for evaluation and lead to better research. The first suggestion of the previous report was related to the existence of a Quality Management System (QMS), which supports quality assurance at various stages in the research cycle and the consortium partners were consulted. The general consensus was that most institutions do not operate under a formal QMS, primarily due to the highly diverse nature of the research processes they manage. Nevertheless, many partners reported the existence of institutional codes of good research practice, which serve as the foundational framework guiding their research activities.

Four consortium partners have provided information about their institutional frameworks and codes that support quality assurance and uphold research integrity, even in the absence of a formal Quality Management System (QMS). They are the following:

- P1-CSIC (Coordinator) has adopted a Code of Scientific Practices (www.csic.es/sites/default/files/2023-01/cbpc_csic2021.pdf, for research staff to promote responsible research conduct and to reinforce the importance of compliance with regulations and consideration of ethical issues.
- P3-UCO (University of Córdoba). UCO has adopted a Code of Responsible Practices and Integrity in Research (BOUCO 2015/00559). This code focuses on research conduct and it provides guidance to ensure also ethical behaviour in all aspects of research execution.
- P8-INRAE (Institut National de Recherche pour l'Agriculture, l'Alimentation et l'Environnement) has developed a quality politics that is available in www.inrae.fr/actualites/politique-qualite-inrae-2023-2027
- P28-JRC (Joint Research Centre) has an Integrated Management System (JRC-IMS), which incorporates the Internal Control Framework and requirements from various ISO standards. The JRC-IMS is structured around three types of processes: i) management processes; ii) scientific and technical support processes; and iii) support processes (infrastructure and services).

As apparently there are many partners without any quality or management system, it is suggested to propose to their organizations to try to implement some minimum bases for a system of quality and ethical behaviour in spite of the highly diverse nature of the research processes they manage. The four partners who are already involved in some kind of quality system could inform them about the bases for beginning the process.

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3.2.2 Personal data (POPD)

No further remarks related to this item in the reported period.

3.2.3 Animals (A)

No further remarks related to this item in the reported period.

3.2.4 Non-EU Countries (NEC)

The exchanges were realised according to the EU legislation and no specific problems have been reported to this mentor. However, in the first report there was a suggestion, related to Biosecurity and Biocontention aspects that are very relevant in the case of *X. fastidiosa* and its vectors, and a suggestion of preparing an updated common protocol on Risk of the handling of *X. fastidiosa* in the BeXyl project was made. The objective was to work under the highest standards of biosecurity, biosafety, and biocontainment, as required for working with a priority quarantine plant pathogen, in the cases of handling live bacterial cultures, infected plant material, or experimental vectors.

It was well known that all partners working with viable *X. fastidiosa* cells or in planta material operate under authorization by their respective National Plant Protection Organizations (NPPOs)that limit experimentation to certified quarantine facilities specifically approved for working with *X. fastidiosa*.

Now a comprehensive Risk Mitigation Plan has been developed and implemented to align with national and EU legislation. This plan addresses not only containment procedures but also emergency protocols, incident reporting mechanisms, and ongoing risk assessments. Each partner institution involved in quarantine-level work with *X. fastidiosa* has designated biosafety officers for overseeing compliance with regulatory requirements and internal biosafety policies. In addition, all personnel involved in handling the pathogen or infected materials receive mandatory training in: i) biosafety procedures and personal protective equipment, ii) emergency response and incident containment, iii) waste decontamination and sample transport protocols and iv) ethical considerations related to dual-use research and public safety. In some institutions, training records are maintained and audited as part of internal quality control systems, and updated courses are offered annually or when necessary for new legislation.

It is relevant to remember that no BeXyl partners are conducting work with viruliferous insect vectors (i.e., insect carriers of *X. fastidiosa*) inside quarantine facilities. All such experiments are carried out exclusively in demarcated infected zones where *X. fastidiosa* is already established and where vector research is legally permitted. These field studies are conducted in coordination with national surveillance and containment programs, to ensuring that vector monitoring, transmission studies, or biological control trials are integrated into existing phytosanitary frameworks.

All institutions handling *X. fastidiosa* maintain detailed logs of: Pathogen acquisition and use (including strain source and passage history), biosafety incidents or near misses, waste disposal and decontamination procedures, dates and results of internal audits and inspections. It is now advised that such information about results of internal audits and inspections could be shared among partners for improving their respective systems. And

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incidences, if any, should require a report that could also be shared with the other partners. Of course, this type of documentation ensures traceability, accountability, and transparency, and it may be made available to regulators or auditors upon request.

As part of BeXyl's commitment to responsible research, the consortium is promoting a biosafety culture where risk assessment is not treated as a static or theoretical exercise. Instead, procedures are regularly re-evaluated in response to: Emerging knowledge *about X. fastidiosa* or its vectors, changes in facility infrastructure or personnel, shifts in national or EU regulations and ethical feedback or external review recommendations.

The data, details and activities that follow the implementation of the Action Risk plan by the different partners is a dynamic approach that should be maintained and optimised throughout the lifespan of the project.

Regarding to the work of the partners on the impact related the environment, two examples are shown.

- P1-CSIC actively promotes sustainable research practices through its dedicated Sustainability Committee that supervises and encourages the adoption of environmentally responsible measures. Such initiatives include the implementation of sustainable field and laboratory practices.
- P8-INRAE undertakes various actions to limit impact on the environment that are publish on the corporate social responsibility: https://www.inrae.fr/en/corporate-social-responsibility-inrae.

Although there are not details about the specific activities of other partners, BeXyl activities that involve field surveys, microbial sampling, and plant material collection are designed to minimize ecological disturbance. Sampling protocols are developed following local, national, and EU biodiversity protection regulations, ensuring that native flora and fauna are not adversely affected. When possible, non-destructive sampling methods are prioritized.

There are also general measures for all the partners to reduce the project's environmental footprint, (online meetings whenever feasible, avoid unnecessary air travel, use materials and documentation distributed in digital format, do not provide printed information, make efforts to minimize the use of plastic, etc). They are very appropriated to minimize the negative impact of the project on the climatic change and probably other measures could be proposed in the next period by some partners.

In addition, I agree that research on *Xylella fastidiosa*, a quarantine pathogen, must consider not only disease management but also the ecological impacts of control strategies. Therefore, it is indicated that potential interventions that could be the applications from project results will be evaluated not only for efficacy but also for their sustainability and compatibility with ecosystem preservation.

Consequently, the environmental protection and biodiversity and sustainability issues are well managed in the BeXyl Project. With the information received the issue is clarified.

3.3 General advices and recommendations

BeXyl partners are committed to continuously improving their ethics performances related to humans, animals and environment through internal awareness campaigns, training in good

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environmental practices, and the integration of sustainability metrics into research planning and evaluation.

The prevention of the malevolent use of research results, including, fabrication, falsification and plagiarism in proposing, performing, or in reporting research results or in reviewing research requires also attention by all the partners.

A new suggestion is related to the use of AI by the partners because the use of AI systems or techniques could be discussed in the context of the different Tasks. Some authors indicate that the manner in which an AI solution is deployed or used, may change the ethical characteristics of the system. Consequently (i) indicate if could AI system/technique stigmatise or discriminate against people (based on sex, race, ethnic social origin, age, disability, sexual orientation, religion, political affiliation, etc.) in the context of this project and (ii) indicate if the AI system/technique interact, replace or influence human decision-making processes (e.g. issues affecting well-being or human rights, or economic, social or political decisions

The final suggestion is a cross-cutting issue to reflect about the potential misuse of some of the obtained results, because *X. fastidiosa* is a quarantine priority pathogen affecting more than six hundred host plants. The research most vulnerable to misuse is research that: i) provides knowledge, materials and technologies that could be channelled into crime or terrorism, ii) could result in chemical, biological, radiological or nuclear weapons and the means for their delivery, and iii) involves developing surveillance technologies that could curtail human and civil rights, etc. As bioterrorism involves the deliberate release of bioweapons to cause death or disease in humans, animals, or plants. it is possible that some research in the BeXyl project can involve materials, methods or technologies or generates knowledge that could be misused for unethical purposes. Although the risk of misuse of research can never be eliminated, it can be minimised by recognising such risks in good time and taking the right precautions when necessary.

3.4 Final Remarks

The ethic aspects indicated in the Deliverable 11.3 are considered very valuable and the information provided is complete and detailed. All the questions, doubts and suggestions indicated in the first report have been appropriately answered. The partners have provided more information about the methodology utilised in several items and about the results obtained and this has made now possible to clarify some details not available at the time of the previous report. Few new comments and suggestions have been indicated in this report to improve exchanges in ethics aspects among partners and regarding to the use of AI, although the general objectives are very well developed.

It is worth noting the continuation of the excellent collaboration between all the partners in the scientific objectives and also in the ethics aspect of this project on learning together and sharing their experiences.

During this 2nd period reported, the Coordinating Team has continued providing me with the necessary information and documents, which I will keep strictly confidential and I remain at the disposal of them to clarify any issue indicated in this report.

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4. EVALUATION OF THE ACTIVITIES PERFORMED TO MAINTAIN HIGH ETHICAL STANDARDS IN BEXYL BY THE EXTERNAL ETHICS ADVISOR (DR. ILJA RICHARD PAVONE)

On 22 July 2025, the BeXyl Project Manager sent the ethics report for the second reporting period to both the External Ethics Advisor and the Ethics Mentor.

Although both responded favourably to his intention to review it on time, to date, as of August 31th, the report from the Ethics Adviser has not been received. This delay is probably due to the summer break and therefore this deliverable only includes the review by the Ethics Mentor.

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ANNEX 1: Consent for BeXyl key informant interviews (FCRA)

Forest Research

BeXyl Entrevista: Formulario de consentimiento

Descripción del proyecto y declaración del consentimiento:
El equipo de investigación social de BeXyl llevará a cabo entrevistas para entender los perspectivos de los actores involucrados en olivar o almendro en Alicante. Los resultados son una parte del estudio de caso para informar los científicos y los formuladores de política sobre las dimensiones sociales de la estrategia del MIP prospectiva para el manejo futuro de las plagas, en particular *Xylella fastidiosa*. Los datos van a recoger, analizar y publicar por el equipo de Forest Research. Cuando la entrevista comienza, usted puede salir en cualquier momento sin una explanación y sin consecuencias adversas.

Muchas gracias para su participación, su apoyo es muy apreciado.

Contacta para preguntas sobre la investigación:
Harry Marshall, Forest Research. Correo: Harry.Marshall@forestresearch.gov.uk
Rachel Orchard, Forest Research. Correo: Rachel.Orchard@forestresearch.gov.uk

Por favor lea las declaraciones siguientes con cuidado – señala **Sí** si está en acuerdo y participar:

1. Entiendo que mi participación es **voluntaria**, y puedo revocar mi consentimiento en cualquier momento antes de 30 de junio 2025 sin consecuencias adversas.	☐ Sí	☐ No
2. Entiendo que mis respuestas son **confidenciales**, que significa que las grabaciones de audio y la transcripción no compartirán afuera del equipo de Forest Research.	☐ Sí	☐ No
3. Entiendo que mis respuestas serán **anónimas,** que significa que no va a contener su nombre ni dirección. Acepto que mis palabras pueden ser **citadas de forma anónima** en publicaciones, informes, páginas web y otros resultados de investigación.	☐ Sí	☐ No
4. Entiendo que la conversación será **grabada** en audio utilizando un dispositivo digital para que la entrevista pueda ser transcrita, y estoy de acuerdo con esto. Esto se almacenará de forma segura y separada de cualquier información identificable.	☐ Sí	☐ No
5. Entiendo que la información recopilada hoy será tratada y almacenada de acuerdo con los requisitos del Reglamento General de Protección de Datos (2018) y el Código Ético de Forest Research.	☐ Sí	☐ No

Firma: ..... Fecha: .....

Nombre: .....

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ANNEX 2: Consent for BeXyl Focus Group (FCRA)

Forest Research

BeXyl Grupo de diálogo: Formulario de consentimiento

Descripción del proyecto y declaración del consentimiento:
El equipo de investigación social de BeXyl llevará a cabo un grupo de diálogo para entender los perspectivos de los agricultores y técnicos sobre el manejo de las plagas en el caso de explotación o parcela de almendro y olivar en Alicante. Los resultados son una parte del estudio de caso para informar los científicos y los formuladores de política sobre las dimensiones sociales de la estrategia del MIP prospectiva para el manejo futuro de las plagas, en particular *Xylella fastidiosa*. Los datos van a recoger, analizar y publicar por el equipo de Forest Research. Cuando el grupo de diálogo comienza, usted puede salir en cualquier momento sin una explanación y sin consecuencias adversas.

Muchas gracias para su participación, su apoyo es muy apreciado.

Contacta para preguntas sobre la investigación:
Harry Marshall, Forest Research. Correo: Harry.Marshall@forestresearch.gov.uk
Rachel Orchard, Forest Research. Correo: Rachel.Orchard@forestresearch.gov.uk

Por favor lea las declaraciones siguientes con cuidado – señala **Sí** si está en acuerdo y participar:

1. Entiendo que mi participación es **voluntaria**, y puedo revocar mi consentimiento en cualquier momento antes de 30 de junio 2025 sin consecuencias adversas.	☐ Sí	☐ No
2. Entiendo que mis respuestas son **confidenciales**, que significa que las grabaciones de audio y la transcripción no compartirán afuera del equipo de Forest Research.	☐ Sí	☐ No
3. Entiendo que mis respuestas serán **anónimas,** que significa que no va a contener su nombre ni dirección. Acepto que mis palabras pueden ser **citadas de forma anónima** en publicaciones, informes, páginas web y otros resultados de investigación.	☐ Sí	☐ No
4. Entiendo que la conversación será **grabada** en audio utilizando un dispositivo digital para que la entrevista pueda ser transcrita, y estoy de acuerdo con esto. Esto se almacenará de forma segura y separada de cualquier información identificable.	☐ Sí	☐ No
5. Entiendo que la información recopilada hoy será tratada y almacenada de acuerdo con los requisitos del Reglamento General de Protección de Datos (2018) y el Código Ético de Forest Research.	☐ Sí	☐ No

Firma: ..... Fecha: .....

Nombre: .....

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ANNEX 3: Consent for BeXyl interviews (JRC)

Section 1. Introduction.

Dear Participant,

We/The Bexyl Project (https://bexylproject.org/) are conducting a survey aiming at understanding farmers' willingness to adopt new Integrated Pest Management (IPM) techniques to control the outbreak of *Xylella fastidiosa* (*Xylella* in short). Your participation is crucial in shaping the future of sustainable farming practices and pest management strategies.

This survey is open to all growers who are currently managing crops that can be potentially affected by *Xylella*. Whether you have direct experience with this pathogen, or are operating in areas at risk, your insights are valuable to us.

The survey is conducted by the European Commission in collaboration with the Bexyl project, a research initiative focused on combating *Xylella*. This effort is part of a broader strategy to involve the agricultural community in developing effective and sustainable pest management solutions.

The results will inform policies and improve support for growers using integrated pest management strategies. They will be disseminated through EU channels, Bexyl project publications, and stakeholder meetings. Participation in the survey will help shape future decisions in the agricultural sector.

The survey will take approximately 30 minutes to complete.

Data will be anonymised and used solely for the purposes of this research, in line with the European Commission's standards for data protection and privacy. Before starting the survey, you will be asked to read and accept our Privacy Statement, which details our data handling practices and your rights as a participant.

Your participation is voluntary. If you have any questions or need further information, please do not hesitate to contact us. We greatly appreciate your time and valuable contribution to this important research.

The European Commission and the BEXYL Project Team.

S.0 Would you be interested in participating?
1. Yes
2. No - Close the survey (Record the refusal) or Reschedule

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Annex 4: Detailed list of all types of materials interchanged in the 2nd reporting period

		Institution requesting the sample				Sending Institution							
Type of material interchan	Description	Partner Nu	Address	Contact Research	Date of re	Partner Nun	Address	Contact Rese	Date of r	Permit required	Status of sl	Origin	Destination
DNA samples	In solution, dry, etc.	1-CSIC	Institute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	may-24	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62762	Diego Olmo	june-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
DNA samples	In solution, dry, etc.	1-CSIC	Institute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	jun-24	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62762	Diego Olmo	july-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
DNA samples	In solution, dry, etc.	1-CSIC	Institute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	jul-24	2-IVIA	Instituto Valenciano de Investigacion Agraria Carretera de Moncada km 0,7. 46113 Moncada, València	Ester Marco	ago-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
DNA samples	In solution, dry, etc.	1-CSIC	Institute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	jul-24	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62762	Diego Olmo	jul-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
DNA samples	In solution, dry, etc.	1-CSIC	Institute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	jul-24	21-IRFAP	Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62762	Diego Olmo	jul-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
DNA samples	In solution, dry, etc.	1-CSIC	Institute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	oct-24	AINIA	Parque Tecnológico de Valencia, Av. Benjamín Franklin, 5-11, 46980 Paterna, Valencia	Alba Yépez	nov-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
DNA samples	In solution, dry, etc.	1-CSIC	Institute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	dec-24	21-IRFAP	Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62762	Diego Olmo	jan-25	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Plant Extracts	In PBS, extraction buffer, etc.	1-CSIC	Institute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	may-24	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62762	Diego Olmo	june-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Plant Extracts	In PBS, extraction buffer, etc.	1-CSIC	Institute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	jun-24	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62762	Diego Olmo	july-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Plant Extracts	In PBS, extraction buffer, etc.	1-CSIC	Institute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	jul-24	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62762	Diego Olmo	jul-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU

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		Institution requesting the sample				Sending Institution							
Type of material interchar	Description	Partner Nu	Address	Contact Researche	Date of re	Partner Nun	Address	Contact Rese	Date of re	Permit required	Status of shipment	Origin	Destination
Plant samples	Portion of stems, leaf petiols, branches, etc.	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	oct-24	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62758	Diego Olmo	nov-24	LoA approved	Received	EU	EU
Plant samples	Portion of stems, leaf petiols, branches, etc.	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	oct-24	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62759	Diego Olmo	nov-24	LoA approved	Received	EU	EU
Plant samples	Portion of stems, leaf petiols, branches, etc.	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	oct-24	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62760	Diego Olmo	nov-24	LoA approved	Received	EU	EU
Plant samples	Portion of stems, leaf petiols, branches, etc.	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	oct-24	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62761	Diego Olmo	nov-24	LoA approved	Received	EU	EU
Plant samples	Portion of stems, leaf petiols, branches, etc.	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	ene-25	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada	Diego Olmo	feb-25	LoA approved	Received	EU	EU
Plant samples	Branches of 20 Cistus monspeliensis from Corsica	P2-IVIA	Valencian Institute for Agricultural Research (IVIA), Plant Protection and Biotechnology Research Center, 46113	Ester Marco-Noales	jun-24	P8-INRAE	Institut de Recherche en Horticulture et Semences UMR1345, 42 rue Georges	Jessica Dittme	jun-24	LOA approved	Received	EU	EU
Plant samples	Portion of leaves heat dessicated and grinded	P9-AU	Auburn University, Rouse Life Sciences Building, Auburn, Alabama , USA 36849	Leonardo De La Fu	oct-24	P11 - ARO	The Volcani Institute, 68 HaMaccabim Road , P.O.B 15159 Rishon LeZion 7505101, Israel	Ofir Bahar	oct-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	nonEU
Plant samples	Portion of leaves heat dessicated and grinded	P9-AU	Auburn University, Rouse Life Sciences Building, Auburn, Alabama , USA 36849	Leonardo De La Fu	may-25	P2 - IVIA	Instituto Valenciano de Investigaciones Agrarias Carretera de Moncada km 0,7. 46113 Moncada, València	Ester Marco	Pending	No (Declaration of content, no harzasous material, etc.)	In transit	EU	nonEU
Plant samples	134 olive stem portions + 71 almond stem portions in silica gel	P13-AIT	Center for Health & Bioresources. AIT Austrian Institute of Technology GmbH Konrad Lorenz Str 243430 Tulln (Austria)	Stéphane Compan	Dec-24	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Lan	Dec-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Plant samples	392 olivestem portions in silica gel	P13-AIT	Austrian Institute of Technology GmbH Konrad Lorenz Str	Stéphane Compan	feb-25	1-CSIC	Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Lan	feb-25	content, no harzasous material, etc.)	Received	EU	EU
Plant samples	142 olive samples (Leaves, stem, roots) frozen at -20° and shipped in dry ice	P13-AIT	Center for Health & Bioresources. AIT Austrian Institute of Technology GmbH Konrad Lorenz Str 243430 Tulln (Austria)	Stéphane Compan	mar-25	P3-UCO	UCO Dpto de Agronomía. Unidad de Entomología Agrícola. Campus de Rabanales. 14071 Córdoba, España	Enrique Quesa	Apr-25	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Plant samples	olive samples inoculated with Beauveria bassiana (Leaves, stem, roots) frozen at -20° and	P13-AIT	Center for Health & Bioresources. AIT Austrian Institute of Technology GmbH Konrad Lorenz Str 243430 Tulln (Austria)	Stéphane Compan	mar-25	P3-UCO	Unidad de Excelencia María de Maetzu. Unidad de Entomología Agrícola. Campus de Rabanales. 14071 Córdoba, España	Enrique Quesa	may-25	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Plant samples	6 olive budsticks frozen at -20° and shipped with cold packs (SynComs)	P13-AIT	Center for Health & Bioresources. AIT Austrian Institute of Technology GmbH Konrad Lorenz Str 243430 Tulln (Austria)	Stéphane Compan	may-25	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Lan	may-25	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU

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		Institution requesting the sample				Sending Institution							
Type of material interchan	Description	Partner Nu	Address	Contact Research	Date of re	Partner Nun	Address	Contact Rese	Date of r	Permit required	Status of shipment	Origin	Destination
Xylella fastidiosa strains	In culture plates	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	march-24	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada	Diego Olmo	april-24	LoA approved	Received	EU	EU
Xylella fastidiosa strains	In culture plates	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	mar-24	8-INRAE	Institut National de Recherche pour L'Agriculture, L'alimentation et L'environnement, 7 rue Jean	Anne-Laure B	april-24	LoA approved	Received	EU	EU
Xylella fastidiosa strains	In culture plates	30-FCRA	Forest Commission Research Agency, Alice Holt Lodge Wrecclesham Farnham Surrey	Debbie Cockrem	april-24	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Lan	may-24	LoA approved	Received	non-EU	EU
Xylella fastidiosa strains	In culture plates	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	april-24	5-CNR	Consiglio nazionale delle Ricerche Institute for Sustainable Plant Protection	Maria Sapona	may-24	LoA approved	Received	EU	EU
Xylella fastidiosa strains	In culture plates	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	may-24	15-APTA-IA	Agencia Paulista de tecnologia dos Agronegocios Centro de Citricultura Sylvio	Helvecio Cole	may-24	LoA approved	Received	non-EU	EU
Xylella fastidiosa strains	In culture plates	8-INRAE	Institut National de Recherche pour L'Agriculture, L'alimentation et	Anne-Laure Boutig	may-24	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida	Blanca B. Lan	jun-24	LoA approved	Received	EU	EU
Xylella fastidiosa strains	In culture plates	1-CSIC	Instituto de Biología Integrativa de Sistemas Universitat de Valencia-CSIC C/Agustín Escardino 9 46980 Paterna, Valencia	Pilar Domingo	jun-24	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Lan	jul-24	LoA approved	Received	EU	EU
Xylella fastidiosa strains	In culture plates	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	feb-25	2-IVIA	Instituto Valenciano de Investigaciones Agrarias Carretera de Moncada km 0,7. 46113 Moncada, València	Ester Marco	march-25	LoA approved	Received	EU	EU
Xylella fastidiosa strains	In culture plates	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	feb-25	21-IRFAP	LaboratoriOficialdeSanitat Vegetal de les Illes Balears (LOSVIB) C/ Eusebi Estada 14507009Palma(+34)971 17 61 00 ext. 62762	Diego Olmo	march-25	LoA approved	Received	EU	EU
Xylella fastidiosa strains	In culture plates	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	mar-25	12- LMU MU	Grosshaderner Str. 2-4 D-82152 Germany Planegg-Martinsried	Silke Robatzel	april-25	LoA approved	Received	EU	EU
Xylella fastidiosa strains	In culture plates	o Nacional de Sanidad	Laboratorio Nacional de Sanidad Vegetal C/ Montirón, 154 27002, Lugo	Irene Suarez	may-25	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Lan	jun-25	LoA approved	Received	EU	EU
Xylella fastidiosa strains	In culture plates (Portion of leaves)	9-AU	Auburn University 209 Rouse Life Sciences Building. Auburn, AL, 36849 5413, USA	Leonardo de la Fu	jun-25	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Lan	In progre	USA permit pending	Planned	EU	non-EU
Xylella fastidiosa strains	IVIA5235, IVIA5387.2, IVIA5770, IVIA5901, IVIA6629, IVIA11529, in culture plates	P8-INRAE	Institut de Recherche en Horticulture et Semences UMR1345, 42 rue Georges Morel, 49070 Beaucouzé,France	Jessica Dittmer	feb-24	P2-IVIA	Instituto Valenciano de Investigaciones Agrarias Carretera de Moncada km 0,7. 46113 Moncada, València	Ester Marco	abr-24	LOA approved	Received	EU	EU
Xylella fastidiosa strains	CO33, TOS4 in culture plates	P8-INRAE	Institut de Recherche en Horticulture et Semences UMR1345, 42 rue Georges Morel, 49070 Beaucouzé,France	Jessica Dittmer	feb-24	P5-CNR	CNR– Institute for Sustainable Plant Protection (IPSP), Via Amendola 165/A, 70126 Bari, Italy	Maria Sapona	mar-24	LOA approved	Received	EU	EU
Xylella fastidiosa strains	WM1-1, Temecula, CCPM1, AlmaEM3, DeDonno, CIST-18, B3_SN 17-2, B80 RO19-1, in culture	P8-INRAE	Institut de Recherche en Horticulture et Semences UMR1345, 42 rue Georges Morel, 49070 Beaucouzé,France	Jessica Dittmer	feb-24	P9-AU	Auburn University, Alabama AL 36849, USA	Leonardo de l	feb-24	LOA approved	Received	non-EU	EU

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Type of material interchar	Description	Partner Nu	Address	Contact Researche	Date of re	Partner Nun	Address	Contact Rese	Date of r	Permit required	Status of shipment	Origin	Destination
Xylella fastidiosa strains	BA_GR31, BA_AL21, BA_AL92 in culture plates	P8-INRAE	Institut de Recherche en Horticulture et Semences UMR1345, 42 rue Georges Morel, 49070 Beaucouzé,France	Jessica Dittmer	nov-24	P5-CNR	CNR– Institute for Sustainable Plant Protection (IPSP), Via Amendola 165/A, 70126 Bari, Italy	Maria Sapona	ene-25	LOA approved	Received	EU	EU
Xylella fastidiosa strains	CCPM1 in culture plates	P8-INRAE	Institut de Recherche en Horticulture et Semences UMR1345, 42 rue Georges Morel, 49070 Beaucouzé,France	Jessica Dittmer	may-25	P9-AU	Auburn University, Alabama AL 36849, USA	Leonardo de l	jun-25	LOA approved	Received	non-EU	EU
Xylella fastidiosa strains	CFBP 8416, CFBP 8418, CFBP 8073, CFBP 8356, CFBP	P2-IVIA	Valencian Institute for Agricultural Research (IVIA), Plant Protection and Biotechnology Research Center, 46113	Ester Marco-Noales	ene-24	P8-INRAE	Institut de Recherche en Horticulture et Semences UMR1345, 42 rue Georges	Jessica Dittme	may-24	LOA approved	Received	EU	EU
Xylella fastidiosa strains	CFBP 8416 in culture plates	P4_UdG	Universitat de Girona Plaça Sant Domènec 3, 17004, Girona, Spain	Emilio Montesinos	mar-24	P8-INRAE	Institut de Recherche en Horticulture et Semences UMR1345, 42 rue Georges	Jessica Dittme	abr-24	LOA approved	Received	EU	EU
Xylella fastidiosa strains	CFBP 8498 in culture plates	P9-AU	Auburn University, Alabama AL 36849, U	Leonardo de la Fu	mar-24	P8-INRAE	Institut de Recherche en Horticulture et Semences UMR1345, 42 rue Georges Morel, 49070 Beaucouzé,France	Jessica Dittme	abr-24	Aphis permit	Received	EU	non-EU
Vector samples	Non-infective Philaenus spumarius. The insects were transported alive on plants	3-UCO	UCO Dpto de Agronomía. Unidad de Entomología Agrícola. Campus de Rabanales. 14071 Córdoba, España	Enrique Quesada	feb-24	1-CSIC (ICA	Instituto de Ciencias Agrarias C. de Serrano, 115 b, Chamartín, 28006 Madrid	Alberto Ferere	jun-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Vector samples	Non-infective Philaenus spumarius. The insects were transported alive on plants	3-UCO	UCO Dpto de Agronomía. Unidad de Entomología Agrícola. Campus de Rabanales. 14071 Córdoba, España	Enrique Quesada	mar-24	1-CSIC (ICA	Instituto de Ciencias Agrarias C. de Serrano, 115 b, Chamartín, 28006 Madrid	Alberto Ferere	may-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Vector samples	Philaenus spumarius. The insects were transported alive on plants	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	jun-24	1-CSIC (ICA	Instituto de Ciencias Agrarias C. de Serrano, 115 b, Chamartín, 28006 Madrid	Alberto Ferere	jun-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Vector samples	Philaenus spumarius. The insects were transported alive on plants	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	oct-24	1-CSIC (ICA	Instituto de Ciencias Agrarias C. de Serrano, 115 b, Chamartín, 28006 Madrid	Alberto Ferere	oct-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Vector samples	Frozen specimens	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Landa	nov-24	1-CSIC (ICA	Instituto de Ciencias Agrarias C. de Serrano, 115 b, Chamartín, 28006 Madrid	Alberto Ferere	nov-24	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Protein lysates (heat-killed) *Xylella fastidiosa* strains	13 strains Fetzer, LMG17159, CFBP8072, CFBP8077, CFBP8084, CFBP8416, CFBP8419,CoDiro, IVIA5770, IVIA 5901, IVIA 11489, IVIA 11529, IVIA 906/24	P16-UCR	CIET. Campus Rodrigo Facio Universidad de Costa Rica, San José, Costa Rica	Carlos Chacón	jun-25	P2-IVIA	Instituto Valenciano de Investigaciones Agrarias Carretera de Moncada km 0,7. 46113 Moncada, València	Ester Marco	Pending	No (Declaration of content, no harzasous material, etc.)	Planned	EU	non-EU
Bacterial strains	5 x bacterial cultures of Xylem-inhabiting beneficial bacteria on agar plates	P13-AIT	Center for Health & Bioresources. AIT Austrian Institute of Technology GmbH Konrad Lorenz Str 243430 Tulln (Austria)	Stéphane Compan	may-25	1-CSIC	Instittute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Lan	may-25	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU

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Type of material interchan	Description	Partner Nu	Address	Contact Research	Date of re	Partner Nun	Address	Contact Rese	Date of re	Permit required	Status of shipment	Origin	Destination
Bacterial strains	5 x bacterial cultures of Xylem-inhabiting beneficial bacteria on agar plates	P22-ACIES	Acies Bio d.o.o. Tehnoloski park 21 SI-1000 Ljubljana, Slovenia	Tona Kogej	may-25	1-CSIC	Institute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Lan	may-25	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Plants for planting	olive trees	21-IRFAP	Laboratori Oficial de Sanitat Vegetal de les Illes Balears. (LOSVIB) C/ Eusebi Estada 145 07009 Palma (+34) 971176100 ext-62762. Spain	Diego Olmo	sep-24	18-IFAPA	Investigación y Formación Agraria, Pesquera, Alimentaria y de la Producción Ecológica (IFAPA). Avenida Grecia s/n edf. ATVO Bermejales, Sevilla 41012. Spain . Tlf (34)	Angjelina Bel	feb-25	LoA and MTA app	Received	EU	EU
Plants for planting	olive trees	5-CNR	Cosiglio Nazionale delle Ricerche, Via Amendola 165/A - 70126 BARI (ITALY)	María Saponari	feb-25	18-IFAPA	Investigación y Formación Agraria, Pesquera, Alimentaria y de la Producción Ecológica (IFAPA). Avenida Grecia s/n edf. ATVO Bermejales, Sevilla 41012. Spain . Tlf (34)	Angjelina Bel	may-25	LoA and MTA app	Received	EU	EU
Plants for planting	olive trees	21-IRFAP	Laboratori Oficial de Sanitat Vegetal de les Illes Balears. (LOSVIB) C/ Eusebi Estada 145 07009 Palma (+34) 971176100 ext-62762. Spain	Diego Olmo	may-25	1-CSIC	Institute for Sustainable Agriculture (CSIC) Avenida Menéndez Pidal s/n, 14004 Córdoba (España)	Blanca B. Lan	may-25	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU
Plants for planting	olive trees	21-IRFAP	Laboratori Oficial de Sanitat Vegetal de les Illes Balears. (LOSVIB) C/ Eusebi Estada 145 07009 Palma (+34) 971176100 ext-62762. Spain	Diego Olmo	april-25	25-AIBE	Agromillora Iberia Ctra. BV 2247 Km 3 Sant Sadurní d'Anoia 08770 Barcelona (España)	Mireia Bordas	may-25	No (Declaration of content, no harzasous material, etc.)	Received	EU	EU

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