

Update of the *Xylella* spp. host plant database – Systematic literature search up to 31 December 2023

European Food Safety Authority (EFSA) | Vincenzo Cavalieri | Elisa Fasanelli | Davide Gibin | Alicia Gutierrez Linares | Pierfederico La Notte | Luca Pasinato | Alice Delbianco

Correspondence: plants@efsa.europa.eu

Abstract

This scientific report provides an update of the *Xylella* spp. host plant database, aiming to provide information and scientific support to risk assessors, risk managers and researchers dealing with *Xylella* spp. Upon a mandate of the European Commission, EFSA created and regularly updates a database of host plant species of *Xylella* spp. The current mandate covers the period 2021–2026. This report is related to the 10th version of the database published in Zenodo in the EFSA Knowledge Junction community, covering literature published from 1 July 2023 up to 31 December 2023, and recent Europhyt outbreak notifications. Informative data have been extracted from 39 selected publications. Sixteen new host plants, five genera and one family were identified and added to the database. They were naturally infected by *X. fastidiosa* subsp. *fastidiosa* or unknown either in Portugal or the United States. No additional data were retrieved for *X. taiwanensis*, and no additional multilocus sequence types (STs) were identified worldwide. New information on the tolerant/resistant response of plant species to *X. fastidiosa* infection were added to the database. The *Xylella* spp. host plant species were listed in different categories based on the number and type of detection methods applied for each finding. The overall number of *Xylella* spp. host plants determined with at least two different detection methods or positive with one method either by sequencing or pure culture isolation (category A), reaches now 451 plant species, 204 genera and 70 families. Such numbers rise to 712 plant species, 312 genera and 89 families if considered regardless of the detection methods applied (category E).

KEYWORDS

data extraction, database, host plants, sequence types, subspecies, *Xylella fastidiosa*, *Xylella* spp.

This is an open access article under the terms of the [Creative Commons Attribution-NoDerivs](https://creativecommons.org/licenses/by/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited and no modifications or adaptations are made.

© 2024 European Food Safety Authority. *EFSA Journal* published by Wiley-VCH GmbH on behalf of European Food Safety Authority.

CONTENTS

Abstract.....	1
1. Introduction	3
1.1. Background and Terms of Reference as provided by the requestor.....	3
1.2. Interpretation of the Terms of Reference.....	3
2. Data and methodologies.....	3
2.1. Extensive literature search.....	3
2.1.1. Information sources.....	4
2.1.2. Search terms.....	4
2.2. Study selection	5
2.3. Data extraction.....	5
2.4. Data warehouse.....	7
2.4.1. Data management.....	7
2.4.2. Data reporting.....	7
3. Results.....	8
3.1. Results of the literature review	8
3.2. Update of records already included in the database.....	9
3.3. Host plant species of <i>Xylella</i> spp.....	9
3.4. <i>X. fastidiosa</i> sequence types and host plants association.....	11
3.5. Tolerant and resistant responses of plant species	12
4. Conclusions.....	14
Abbreviations	14
Acknowledgements.....	14
Conflict of interest	15
Requestor.....	15
Question number.....	15
Copyright for non-EFSA content.....	15
References.....	15
Appendix A.....	16
Appendix B.....	33
Appendix C.....	42
Appendix D.....	44
Appendix E	67
Annex A.....	69

1 | INTRODUCTION

1.1 | Background and Terms of Reference as provided by the requestor

In the context of Article 31 of Regulation (EC) No 178/2002, EFSA was asked by the European Commission DG SANTE to provide technical assistance in the field of plant health as regards the regulated harmful organism *Xylella fastidiosa*, as per letter to EFSA's Director dated 30 June 2016 (Reference ARES (2016) 3126989).

EFSA was requested to further specify and update the host plants database of *X. fastidiosa* available in 2016 (EFSA, 2016) taking into account the different *X. fastidiosa* subspecies and strains (with particular reference to the European isolates), with the inclusion of information on non-susceptible plants and varieties and negative results of diagnostic tests when available. EFSA was requested to maintain and update this database periodically and to make new releases available on the EFSA website, together with a Scientific Report. The database should focus on plants confirmed to be infected by at least two detection methods in field conditions or via vector transmission under experimental conditions. Such request was for the period 2016–2020.

This mandate was extended by the European Commission DG SANTE for the period 2021–2026, with the aim to continue the update of that database. EFSA is requested to deliver two updates per year of the database.

1.2 | Interpretation of the Terms of Reference

EFSA delivered in September 2018 a renovated database of host plants of *Xylella* spp., taking into account both species of the genus *Xylella* (*X. fastidiosa* and *X. taiwanensis*) (EFSA, 2018), which was last updated in December 2023 (EFSA, 2023). Raw data and interactive reports were published in Zenodo¹ in the EFSA Knowledge Junction community and in Microstrategy² platform, together with a Scientific Report.

As per terms of reference (ToR), EFSA was requested to maintain and update the *Xylella* spp. host plant database for the period 2021–2026, and to publish new releases online together with a report twice per year. This Scientific Report provides a new update on the database of host plants of *Xylella* spp. published in December 2023 (EFSA, 2023). An extensive literature search was conducted to retrieve recent publications on the topic and new informative data on host plant species of *Xylella* spp. were collected. Such report provides information on the literature review and a detailed view on the currently known host plants of *Xylella* spp.

2 | DATA AND METHODOLOGIES

The methodologies developed for the *Xylella* spp. host plant database published in 2018 (EFSA, 2018) were applied in this report.

The process was divided in the following steps:

- Extensive literature search to identify relevant references.
- Selection of studies based on title, abstract and full text.
- Data extraction of relevant information.
- Data analysis and reporting.

2.1 | Extensive literature search

The review question, 'Which plant species can host *Xylella* / *Xylella* associated disease?' was broken down into key stages using the P/O conceptual model described in the EFSA systematic review guidance (EFSA, 2010):

- Population of interest (P)

The population of interest is that of plant species, worldwide.

- Outcome (condition of interest) (O)

The outcome (condition of interest) is that of *Xylella* spp. infection.

Two main elements were considered for the extensive literature search: the sources of information (Table 1) to be consulted and the search strategy (Table 2).

¹<https://doi.org/10.5281/zenodo.1339343>.

²<https://www.efsa.europa.eu/en/microstrategy/xylella>.

2.1.1 | Information sources

The search strategy was run in all databases listed in Table 1 via the Web of Science (Clarivate Analytics) and Scopus platforms with no language or document type restriction.

TABLE 1 Sources of information.

Database	Platform
Scopus	Scopus
BIOSIS Citation Index	Web of Science
CABI: CAB Abstracts®	
Chinese Science Citation DatabaseSM	
Current Contents Connect	
FSTA® - the food science resource	
KCI-Korean Journal Database	
MEDLINE®	
Russian Science Citation Index	
SciELO Citation Index	
Web of Science Core Collection	
• Science Citation Index Expanded	
• Social Sciences Citation Index	
• Arts & Humanities Citation Index	
• Conference Proceedings Citation Index- Science	
• Conference Proceedings Citation Index- Social Science & Humanities	
• Book Citation Index – Science	
• Book Citation Index – Social Sciences & Humanities	
• Emerging Sources Citation Index	
• Current Chemical Reactions	
• Index Chemicus	
Zoological Record	

2.1.2 | Search terms

The syntax of the search string, developed for the *Xylella* spp. host plants database published in 2018 (EFSA, 2018), was adapted and run into each platform databases listed in Table 1 on 15 February 2024. As the scope of the search was to retrieve references published after June 2023, the selected time span was from 1 July 2023 up to 31 December 2023. The search strings and the number of retrieved references are shown in Table 2.

TABLE 2 Search strings and results.

Platform	Query	Results
Scopus	(TITLE-ABS-KEY (xylella OR xyllela OR xylela OR (pierce* W/2 disease) OR (((plum OR plums) AND "leaf scald*")) OR ((phony W/2 (peach* OR disease*)) OR ((citrus AND variegat* AND chlorosis) OR crespersa OR "almond leaf scorch*" OR "bacterial leaf scorch*" OR "coffee leaf scorch*" OR "mulberry leaf scorch*" OR "oleander leaf scorch*" OR "sycamore leaf scorch*" OR "Periwinkle wilt" OR "Ragweed stunt" OR ((olive W/50 "quick decline syndrome")) OR "Xylem inhabiting bacteri*" OR "Xylem limited bacteri*" OR fxib OR fxjb OR "rickettsialike bacteri*" OR "rickettsia like bacteri*")) AND (ORIG-LOAD-DATE >20230701 AND ORIG-LOAD-DATE <20231231))	74
Web of Science	TS=(xylella OR xyllela OR xylela OR (pierce* NEAR/2 disease) OR (((Plum OR plums) AND "leaf scald*")) OR ((Phony NEAR/2 (peach* OR disease*)) OR ((citrus AND variegat* AND chlorosis) OR crespersa OR "almond leaf scorch*" OR "bacterial leaf scorch*" OR "coffee leaf scorch*" OR "mulberry leaf scorch*" OR "oleander leaf scorch*" OR "sycamore leaf scorch*" OR "Periwinkle wilt" OR "Ragweed stunt" OR ((Olive NEAR "quick decline syndrome")) OR "Xylem inhabiting bacteri*" OR "Xylem limited bacteri*" OR FXIB OR FXJB OR "rickettsialike bacteri*" OR "rickettsia like bacteri*"))	132

The collected references were downloaded and imported into an EndNote X9 library (Clarivate Analytics). Duplicates and references already included in the update published in December 2023 (EFSA, 2023) were removed using EndNote X9 and the remaining references were uploaded on DistillerSR online³ together with the full-texts in portable document format (pdf).

Twelve Europhyt outbreak notifications⁴ (accessed on 11 March 2024) and two additional references were also included.

³<https://www.evidencepartners.com/>.

⁴https://food.ec.europa.eu/plants/plant-health-and-biosecurity/europhyt/network_en.

2.2 | Study selection

The collected references were screened for relevance in two steps:

1. Title and abstract screening.
2. Full-text screening of the references that passed the first step.

Inclusion/exclusion criteria were applied in each step and two reviewers worked in parallel screening the references.

The first step required the reviewers to answer two questions, listed in Table 3, considering only title and abstract of the references. The aim of this step was to select only references presenting original research data on *Xylella* or *Xylella*-associated disease.

TABLE 3 Inclusion/exclusion criteria for title and abstract screening.

Question text	Type of answer	Answer text	Exclusion criteria
Is <i>Xylella</i> / a <i>Xylella</i> associated disease/a <i>Xylella</i> synonym the topic of the study?	Only one of the possible alternative answers can be selected	Yes	Included
		No	Excluded
Is it a primary research study?	Only one of the possible alternative answers can be selected	Yes	Included
		No	Excluded

The references that passed the first step were submitted to the full-text screening. This second step required the reviewers to answer four questions (Table 4); three of them are descriptive (neutral) whereas the fourth has an inclusion/exclusion role.

TABLE 4 Inclusion/exclusion criteria at full-text screening.

Question text	Type of answer	Answer text	Exclusion criteria
Is an English abstract present?	Only one of the possible alternative answers can be selected	Yes	Neutral
		No	Neutral
Which is the type of the publication?	Only one of the possible alternative answers can be selected	Peer-reviewed article	Neutral
		Article	Neutral
		Book	Neutral
		Conference proceedings	Neutral
		Abstract	Neutral
		Technical publication/Report	Neutral
Is the <i>Xylella</i> host plant the main scope of the study?	Only one of the possible alternative answers can be selected	Yes	Neutral
		No	Neutral
Is <i>Xylella</i> /a <i>Xylella</i> -associated disease/a <i>Xylella</i> synonym studied in association with a host plant?	Only one of the possible alternative answers can be selected	Yes	Included
		No	Excluded

2.3 | Data extraction

Informative data listed in Table 5 were extracted from the selected references. For each reference, the first reviewer performed the data extraction whereas the second reviewer conducted the quality check of the extracted data. Data extraction from each reference can generate one or several records. A record is defined as a unique combination of data related to a detection event, and it corresponds to a single Excel row of the files published in Zenodo (see Section 2.4.1).

TABLE 5 Data extraction structure.

Extracted data	Description
General information	<i>In this section, the general information about the study is reported</i>
RecordID	Unique number allocated to each row
RefID	Unique number allocated to each reference within the DistillerSR software
Reference	Full reference
Publication year	Year of the publication
Starting year	Starting year of the study, as reported in the publication
Ending year	Ending year of the study, as reported in the publication
Botanical identification	<i>The botanical identification of the plant, both as reported in the publication and according to the updated taxonomy of the EPPO Global Database,⁵ is reported in this section</i>
Plant EPPO code	EPPO code of the plant species, from the EPPO global database. xxxx For plant species not present in the EPPO global database, a new code was created in the EFSA catalogue
Plant family	Plant family, from the EPPO global database ⁵
Plant genus	Plant genus, from the EPPO global database ⁵
Plant species	Plant species, from the EPPO global database ⁵
Reported plant species	Name of the plant species as reported in the publication
Common name	Common name of the plant species, as reported in the publication
Cultivar	Cultivar or plant variety, as reported in the publication
Infection information	<i>Detailed information about the infection and location of the plant is reported in this section</i>
Infection method (Level 1)	The infection of the plant can be natural, artificial or not specified
Infection method (Level 2)	Subcategories of natural infection: during survey activity, during research activity. 'Research activity' is used when plants are planted under natural inoculum pressure and infection development was monitored without interfering Subcategories of artificial infection: mechanical inoculation (detailed at level 3a), vector transmission (detailed at level 3b)
Mechanical inoculation (Level 3a)	Subcategories of mechanical inoculation: budding, grafting, needle, root uptake, stem absorption, syringe
Infection vector species (Level 3b)	Insect species used in artificial vector transmission
Location type	The place where the plant was placed: natural habitat, greenhouse, screenhouse, interception, not specified
Geographic information	<i>In this section, the geographical location of the plant is reported, as detailed as possible. In case of intercepted plants, the reported location is the geographical origin of the plant and not the country and location where it was intercepted</i>
Country code	From the EFSA catalogue, based on NUTS (Eurostat) and GAUL (FAO) territorial unit nomenclature
Country	From the EFSA catalogue, based on NUTS (Eurostat) and GAUL (FAO) territorial unit nomenclature
Location	Location description (state/region/province/municipality) from the EFSA catalogue, based on NUTS (Eurostat) and GAUL (FAO) territorial unit nomenclature
Additional Location	Additional information on the location, as reported in the publication
Coordinates precision	Coordinates as reported in the publication
Latitude	Latitude, as reported in the publication
Longitude	Longitude, as reported in the publication
Pest description	<i>Information about the pest is reported in this section, together with genetic data</i>
Pest EPPO code	EPPO code of the pest, from the EPPO global database ⁵
Pest species	Name of <i>Xylella</i> spp., from the EPPO global database ⁵
Pest subspecies	<i>Xylella fastidiosa</i> subspecies, from the EPPO global database ⁵ . If the subspecies is inferred from another publication, a note is added to comment on the genotyping
Reported pest	Name of <i>Xylella</i> spp. as reported in the publication. Names used before the genus <i>Xylella</i> was established (up to 1987): Alfalfa dwarf virus, Morus suffodiens virus, Phony peach bacterium, Pierce's disease bacterium, Pierce's disease virus, <i>Rickettsia</i> -like bacteria, Rod-shaped bacteria, Xylem-inhabiting bacteria. Names used from 1987 (when the genus <i>Xylella</i> was established): <i>Xylella fastidiosa</i> , <i>Xylella taiwanensis</i>
Disease	Name of the disease caused by <i>Xylella</i> spp., as reported in the publication: Alfalfa dwarf, Almond leaf scorch, Bacterial leaf scorch, Blueberry bacterial leaf scorch, Citrus variegated chlorosis, Coffee leaf scorch, Coffee stem atrophy, Crespiera, Elm leaf scorch, Leaf scorch disease, Mulberry leaf scorch, Oleander leaf scorch, Olive quick decline syndrome, Pear leaf scorch, Pecan bacterial leaf scorch, Periwinkle wilt, Phony peach disease, Pierce's disease, Plum leaf scald, Potato purple top disease, Ragweed stunt, Sweetgum dieback, Sycamore leaf scorch
Strain	Name of the strain of <i>Xylella</i> spp., as reported in the publication

⁵<https://gd.eppo.int/>.

TABLE 5 (Continued)

Extracted data	Description
MLST (Multilocus sequence type)	Sequence type (ST) of <i>Xylella fastidiosa</i> , as reported in the publication. If the ST is inferred from another publication, a note is added in the genotyping comment
Genotyping comment	Comment or additional information regarding the pest
Methods of identification	<i>In this section, the identification methods applied to detect Xylella spp. infection are listed. Eight detection methods were considered and for each of them, the outcome of the analysis (positive or negative), together with the number of infected plants and the total number of analysed plants, were reported. Moreover, additional information could be added in the comment column beside each detection method</i>
Symptoms	Observation of symptoms in the plant, as reported in the publication
Symptoms expression in test plants	Observation of symptom development in test plants after an attempt to transmit the pathogen through vectors
Culture	Pure culture isolation (i.e. isolation of cultivable bacteria from tissue samples on solid culture media)
Microscopy	Observation of <i>Xylella</i> spp. bacteria through microscopic analysis techniques
ELISA	Enzyme-linked immunosorbent assay
Other immunological techniques	Immunological techniques other than ELISA
PCR-based methods	Polymerase chain reaction-based methods (PCR, nested PCR, qPCR, etc.)
Sequencing	Sequence analysis
Host status	<i>Information about the tolerance and resistance response of the plant</i>
Tolerance/Resistance reported	Tolerant/Resistant status of the plant, as reported in the publication
Tolerance/Resistance category	Categories describing the response of the tolerant/resistant plant: lack of infection or negative reading, lack of systemic movement, lack or reduction of symptoms, lack or reduction of symptoms – lower bacterial population, lack or reduction of symptoms – lower bacterial population – lower disease incidence, lack or reduction of symptoms – lower disease incidence, lower bacterial population, lower bacterial population – lower disease incidence, lower disease incidence, infection not persistent, reported as tolerant/resistant (no details)
Tolerance/Resistance comment	Comment on the tolerant/resistant response of the plant, as reported in the publication
Additional information	
Comment	Additional relevant information or comment on the study
Confirmed record	'Yes' for confirmed records, 'No' for unconfirmed/dubious records. Unconfirmed records were included in the data extraction but excluded from the data analysis

2.4 | Data warehouse

A harmonised data model has been established to collect data on *Xylella* spp. host plants. The aim was to establish a harmonised data flow for the collection and the collation of an extensive literature review generated data in the plant health domain. Data are stored in EFSA Scientific Data Warehouse (S-DWH), after that an ETL (Extract, Transform, Load) procedure is applied in order to harmonise and calculated the statistics.

2.4.1 | Data management

The collected data have been submitted to the EFSA Data Collection Framework (DCF). DCF is the upfront system in the EFSA pipeline of data collection tools and allows a first step of harmonisation against the EFSA controlled reference terminology (aka EFSA catalogues). Data have been then included in the S-DWH by means of a standardised Extract Transform Load (ETL) procedure and they have been further analysed and managed to generate needed statistics.

Data are available as interactive reports on the Microstrategy platform at the following link: <https://www.efsa.europa.eu/en/microstrategy/xylella>

Raw data and related metadata are published in Zenodo in the EFSA Knowledge Junction community, this report refers to **version 10** (<https://doi.org/10.5281/zenodo.1339343>).

2.4.2 | Data reporting

Data reporting was designed to distinguish the *Xylella* spp. host plant species, based on the number and type of detection methods applied for each finding. Different combinations of detection methods were considered:

- A.** Plant species positive with at least two detection methods (among: ELISA, other immunological techniques, PCR-based methods, symptoms observation on the test plant in experimental vector transmission) or positive with one method (either by sequencing or pure culture isolation).

- B. All plant species included in category A, plus plant species positive with at least two detection methods (including microscopy).
- C. All plant species included in category B, plus plant species positive with at least one detection method (among: ELISA, other immunological techniques, PCR-based methods, symptoms observation on the test plant in experimental vector transmission).
- D. All plant species included in category C, plus plant species positive with microscopy.
- E. All positive plant species reported, regardless of the detection methods applied (including positive records but without the detection method specified, ELISA, microscopy, other immunological techniques, PCR-based methods, pure culture isolation, sequencing, symptom observations, symptoms observation on the test plant in experimental vector transmission).

3 | RESULTS

3.1 | Results of the literature review

The extensive literature search was conducted on 15 February 2024 on Web of Science and Scopus platforms and 206 references were collected. Duplicates and references already included in EFSA (2023) were removed and 137 references were uploaded in DistillerSR and screened for relevance. Results of the screening process are shown in Figure 1.

In the first step, i.e. title and abstract screening, 87 references were excluded either because they do not focus on *Xylella* or *Xylella*-associated diseases and/or they are not primary research studies. The selected 50 references were subjected to the second step of the screening process, i.e. the full-text screening. Twenty-five references, in which *Xylella* spp. are studied in association with a host plant, were selected. Twelve Europhyt outbreak notifications⁶ containing informative data and two additional references were also included in the data extraction. Totally, 39 references (listed in Appendix E) were included in this update of the database and from which informative data listed in Table 5 were extracted.

⁶https://food.ec.europa.eu/plants/plant-health-and-biosecurity/europhyt/network_en.

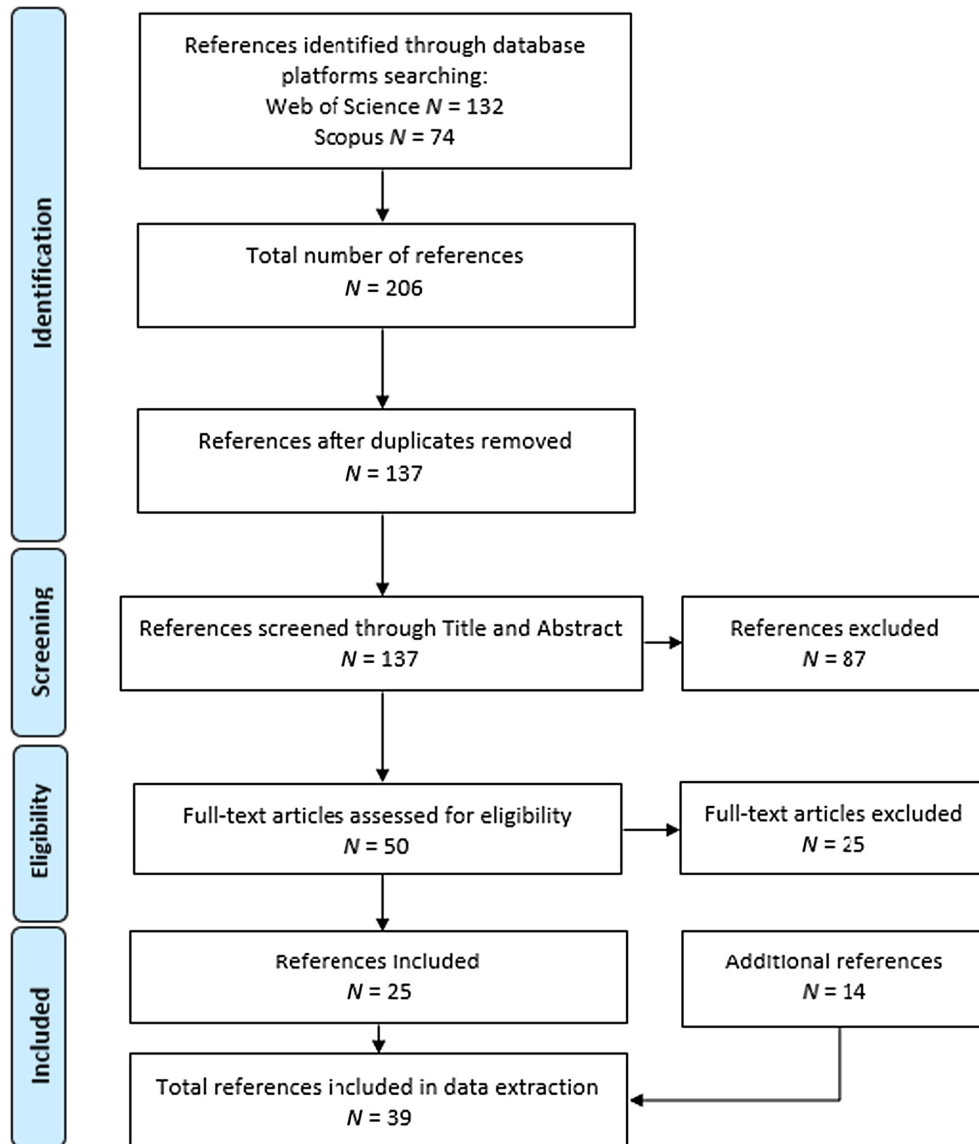


FIGURE 1 Flow diagram of the screening process.

3.2 | Update of records already included in the database

Scientific names of plant species, genera and families are reported, as far as possible, accordingly to the taxonomy of the EPPO Global Database (EPPO, 2023) that is constantly being updated. Therefore, changes of scientific names of plant species, genera and families in the *Xylella* spp. host plant database are related to the update of the taxonomy in the EPPO Global Database.

Records referring to Europhyt outbreak notifications, that may contain uncomplete data, are updated whenever additional information (e.g. further identification of the plant species, *X. fastidiosa* subspecies, ST) become available.

3.3 | Host plant species of *Xylella* spp.

The updated numbers of host plant species, genera and families (according to the different categories reported in Section 2.4.2) are reported in Figure 2 and Table 6. The number of plant species raised to 451 according to category A (i.e. plant species positive with at least two detection methods [among: symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation] or positive with one method [either by sequencing or pure culture isolation]) to 712 plant species of category E (i.e. all positives plant species reported, regardless of the detection methods).



FIGURE 2 Number of host plant species according to the different categories (as described in Section 2.4.2). Plant species in category A are included in category B; plant species in category B are included in category C; plant species in category C are included in category D; plant species in category D are included in category E.

TABLE 6 Number of host plant species, genera and families of *Xylella* spp. according to categories A, B, C, D, E (based on the detection methods applied – see Section 2.4.2).

	A	B	C	D	E
Number of host plant species	451	456	698	707	712
Number of host plant genera	204	205	311	311	312
Number of host plant families	70	70	89	89	89

Compared to the previous update of the database published in December 2023 (EFSA, 2023), 16 taxa were added to the database (Table 7). These plant species were identified as infected by either *X. fastidiosa* subsp. *fastidiosa* or unreported subspecies (i.e. unknown) in natural conditions in the EU (Portugal) or outside the EU (United States). Five plant genera and one plant family were also inserted for the first time in the database.

Anew important update has also to be highlighted regarding the plant species *Vitis vinifera*, that has been reported for the first time as infected by *X. fastidiosa* subsp. *multplex* in a survey conducted in Virginia (US) (Abdelrazek et al., 2023). In relation to this publication, two additional publications (Nita et al., 2015; Schaad et al., 2004) were identified and added to the database. These publications report the infection by *X. fastidiosa* subsp. *multplex* of *Vitis* sp. and *Vitis aestivalis*.

TABLE 7 New host plants of *X. fastidiosa*. For each host plant the infection method, the country, the *X. fastidiosa* subspecies and the category (see Section 2.4.2) are reported. The new family, new genera and new plant species are highlighted in bold.

Plant EPPO code	Plant family	Plant genus	Plant species	Infection method	Country	Xf subspecies	Category
ADCSS	Fabaceae	Adenocarpus	<i>Adenocarpus</i> sp.	Natural	Portugal	Unknown	A
AILAL	Simaroubaceae	Ailanthus	<i>Ailanthus altissima</i>	Natural	Portugal	Unknown	A
CIPCA	Betulaceae	Carpinus	<i>Carpinus caroliniana</i>	Natural	United States	Unknown	C
CETSS	Ulmaceae	Celtis	<i>Celtis</i> sp.	Natural	United States	Unknown	C
CSTLA	Cistaceae	Cistus	<i>Cistus ladanifer</i>	Natural	Portugal	<i>fastidiosa</i>	A
CQMAL	Rutaceae	Coleonema	<i>Coleonema album</i>	Natural	Portugal	Unknown	A
CZSMU	Fabaceae	Cytisus	<i>Cytisus multiflorus</i>	Natural	Portugal	Unknown	A
CZSST	Fabaceae	Cytisus	<i>Cytisus striatus</i>	Natural	Portugal	Unknown	A
CZSST	Fabaceae	Cytisus	<i>Cytisus striatus</i>	Natural	Portugal	<i>fastidiosa</i>	A
ECSLU	Fabaceae	Echinopartum	<i>Echinopartum lusitanicum</i>	Natural	Portugal	Unknown	A
HAICO	Cistaceae	Halimium	<i>Halimium calycinum</i>	Natural	Portugal	Unknown	A
HAILA	Cistaceae	Halimium	<i>Halimium lasianthum</i>	Natural	Portugal	Unknown	A
HAIOC	Cistaceae	Halimium	<i>Halimium ocymoides</i>	Natural	Portugal	Unknown	A
HAISS	Cistaceae	Halimium	<i>Halimium</i> sp.	Natural	Portugal	Unknown	A
PRNCM	Rosaceae	Prunus	<i>Prunus campanulata</i>	Natural	United States	Unknown	C
QUEPR	Fagaceae	Quercus	<i>Quercus prinus</i>	Natural	United States	Unknown	C
SAXAT	Salicaceae	Salix	<i>Salix atrocinerea</i>	Natural	Portugal	Unknown	A

The overall number of host plant species infected naturally, artificially and in unspecified conditions by the different *X. fastidiosa* subspecies and according to the different categories are reported in Tables 8–10. The plant species behind the numbers shown in those tables are listed in Appendices A–C. In those appendices, the full lists of plant species infected by the different *X. fastidiosa* subspecies naturally, artificially and in not specified conditions according to the five categories are shown.

The highest number of plant species naturally infected is still recorded for *X. fastidiosa* subsp. *multiplex* (229 according to category A, up to 236 for category E), followed by subsp. *fastidiosa* and subsp. *pauca*. In artificial infection, 43 plant species (category A, and 85 for category E) were successfully infected by *X. fastidiosa* subsp. *fastidiosa*. Twenty plant species were artificially infected by subsp. *pauca* and 21 by subsp. *multiplex* (category A), up to 35 and 38 for category E (for *pauca* and *multiplex*, respectively).

No new host plants were reported for the pathogen species *Xylella taiwanensis*, that so far was recorded only in *Pyrus pyrifolia* plants.

TABLE 8 Number of host plant species, naturally infected, susceptible to the different *X. fastidiosa* subspecies according to categories A, B, C, D, E (as described in Section 2.4.2).

Category	fastidiosa	fastidiosa_sandyi	morus	multiplex	pauca	sandyi	tashke	Unknown
A	68	2	4	229	55	7	1	200
B	68	2	4	229	55	7	1	205
C	71	2	4	236	59	8	1	407
D	71	2	4	236	59	8	1	413
E	71	2	4	236	59	8	1	424

TABLE 9 Number of host plant species, artificially infected, susceptible to the different *X. fastidiosa* subspecies according to categories A, B, C, D, E (as described in Section 2.4.2).

Category	fastidiosa	morus	multiplex	pauca	sandyi	tashke	Unknown
A	43	2	21	20	5	0	89
B	44	2	21	21	5	0	94
C	84	2	37	35	11	1	202
D	84	2	37	35	11	1	208
E	85	2	38	35	11	1	216

TABLE 10 Number of host plant species, infected in unspecified conditions, susceptible to the different *X. fastidiosa* subspecies according to categories A, B, C, D, E (as described in Section 2.4.2).

Category	fastidiosa	Multiplex	pauca	sandyi	Unknown
A	7	13	8	1	16
B	7	13	8	1	18
C	7	16	8	2	27
D	7	16	8	2	29
E	7	16	8	2	31

3.4 | *X. fastidiosa* sequence types and host plants association

The full list of plant species infected by the different *X. fastidiosa* sequence types (ST) under natural, artificial and unspecified conditions is reported in Appendix D. For each plant species, the number of records⁷ reporting infection by a specific ST is counted. For natural infection, the country where the plant species have been identified is also reported, whereas for artificial and unspecified infection only, the total number of records is presented in the appendix.

Two hundred records reporting information of plant species infected by different STs were added to this update of the database, for a total number of 2810 records with information on 269 plant species and 89 different STs. No additional STs have been identified compared to the previous version of the database (EFSA, 2023). Most of the records (1951) refer to natural infections that were reported in North, Central and South America (United States of America, Mexico, Honduras, Costa Rica, Ecuador, Brazil and Argentina), Asia (Israel) and Europe (Portugal, Spain, France and Italy). ST53 (subsp. *pauca*) is still the most reported ST in natural infections (493 records), while ST1 (subsp. *fastidiosa*) remains the most used ST in artificial infections (307 records).

⁷Record' as defined in Section 2.3.

3.5 | Tolerant and resistant responses of plant species

Information on tolerant and resistant response of plant species to *X. fastidiosa* infection have also been reported in the database. The list of plant genera and species for which tolerant and resistant responses have been identified is reported in Table 11. Different tolerant/resistant responses to *X. fastidiosa* infection has been grouped into 11 categories, as reported in Table 12. Those categories include the plant response/s for which the authors of the publication considered that plant as tolerant/resistant to *X. fastidiosa* infection.

Compared to the previous version of the database (EFSA, 2023), 41 records reporting tolerance or resistance responses to *X. fastidiosa* were added to the database: one record for *Citrus* sp., 12 records for *Olea europaea* and 28 records for *Vitis vinifera*. The overall number of records of plant species with tolerance or resistance responses to *X. fastidiosa* is 780, and the most studied genera remains *Vitis*, *Citrus* and *Prunus* (Table 11). The new records added to the database were extracted from nine recent publications, most of them on artificial infections (Table 12).

TABLE 11 Number of records reporting tolerant/resistant response for plant genus and species.

Plant genus and species	Number of records
Arabidopsis	4
<i>Arabidopsis thaliana</i>	4
Citrus	176
<i>Citrus celebica</i>	1
<i>Citrus clementina</i>	4
<i>Citrus jambhiri</i>	2
<i>Citrus junos</i>	1
<i>Citrus latifolia</i>	1
<i>Citrus limettioides</i>	1
<i>Citrus limon</i>	14
<i>Citrus medica</i>	1
<i>Citrus natsudaoidai</i>	1
<i>Citrus paradisi</i>	5
<i>Citrus reticulata</i>	9
<i>Citrus reticulata</i> × <i>C. sinensis</i> × <i>C. paradisi</i>	1
<i>Citrus sinensis</i>	8
<i>Citrus</i> sp.	71
<i>Citrus tangerina</i>	32
<i>Citrus</i> × <i>nobilis</i>	11
<i>Citrus</i> × <i>tangelo</i>	13
Coffea	5
<i>Coffea arabica</i>	4
<i>Coffea</i> sp.	1
Fortunella	1
<i>Fortunella margarita</i>	1
Medicago	2
<i>Medicago sativa</i>	2
Olea	47
<i>Olea europaea</i>	47
Platanus	2
<i>Platanus</i> sp.	2
Poncirus	3
<i>Poncirus trifoliata</i>	3
Populus	1
<i>Populus</i> × <i>canescens</i>	1
Prunus	70
<i>Prunus angustifolia</i>	1
<i>Prunus armeniaca</i>	3

TABLE 11 (Continued)

Plant genus and species	Number of records
<i>Prunus avium</i>	5
<i>Prunus cerasus</i>	2
<i>Prunus domestica</i>	3
<i>Prunus dulcis</i>	18
<i>Prunus persica</i>	7
<i>Prunus salicina</i>	14
<i>Prunus</i> sp.	15
<i>Prunus</i> × <i>amygdalo-persica</i>	2
Quercus	2
<i>Quercus ilex</i>	2
Vaccinium	10
<i>Vaccinium corymbosum</i>	6
<i>Vaccinium</i> sp.	4
Vitis	457
<i>Vitis aestivalis</i>	4
<i>Vitis arizonica</i>	104
<i>Vitis arizonica</i> hybrid	6
<i>Vitis arizonica</i> × <i>V. rupestris</i>	6
<i>Vitis arizonica</i> × <i>V. vinifera</i>	1
<i>Vitis arizonica/candicans</i>	3
<i>Vitis arizonica/candicans</i> × <i>V. rupestris</i>	2
<i>Vitis arizonica/girdiana</i>	1
<i>Vitis berlandieri</i>	9
<i>Vitis berlandieri</i> × <i>riparia</i> hybrids	6
<i>Vitis berlandieri</i> × <i>V. rupestris</i>	4
<i>Vitis candicans</i>	23
<i>Vitis champinii</i> × (<i>V. solonis</i> × <i>V. othello</i>)	1
<i>Vitis cinerea</i>	7
<i>Vitis cinerea</i> × <i>V. berlandieri</i>	2
<i>Vitis girdiana</i>	20
<i>Vitis monticola</i>	4
<i>Vitis munsoniana</i>	3
<i>Vitis popenoei</i>	1
<i>Vitis riparia</i>	19
<i>Vitis rotundifolia</i>	59
<i>Vitis rotundifolia</i> × <i>V. rupestris</i>	1
<i>Vitis simpsonii</i>	1
<i>Vitis</i> sp.	76
<i>Vitis tiliaefolia</i>	1
<i>Vitis treleasei</i>	6
<i>Vitis vinifera</i>	64
<i>Vitis vinifera</i> hybrid	6
<i>Vitis aestivalis</i> var. <i>smalliana</i>	4
<i>Vitis aestivalis</i> var. <i>smalliana</i> × <i>V. simpsonii</i>	4
<i>Vitis aestivalis</i> var. <i>smalliana</i> × <i>V. vinifera</i>	1
<i>Vitis nesbittiana</i>	2
<i>Vitis rufotomentosa</i>	1
<i>Vitis shuttleworthii</i>	5
Total	780

TABLE 12 Number of records and publications for tolerance/resistance category.

Tolerance/resistance category	Number of records			Number of publications
	Artificial infection	Natural infection	Infection not specified	
Lack of infection or Negative reading	43	78		15
Lack of systemic movement	52			9
Lack or reduction of symptoms	95	79		15
Lack or reduction of symptoms – Lower bacterial population	44	14		21
Lack or reduction of symptoms – Lower bacterial population - Lower disease incidence	9	2		4
Lack or reduction of symptoms – Lower disease incidence	3	2		2
Lower bacterial population	235	8		24
Lower bacterial population – Lower disease incidence		3		3
Lower disease incidence		6		4
Not persistent infection	5	3		3
Reported as tolerant/resistant_no details	22	28	49	48
Total	508	223	49	148

4 | CONCLUSIONS

Following a request from the European Commission, EFSA was asked to create, maintain and regularly update a database of host plant species of *Xylella* spp. This Scientific Report summarises the most interesting information reported in the new version of the database (**version 10**).

An extensive literature search was performed including all scientific papers published up to 31 December 2023, as well as additional Europhyt outbreak notifications (last accessed on 11 March 2024).

By these searches, 39 publications were selected and informative data were extracted. Sixteen plant species, five genera and one family were identified as new hosts of *X. fastidiosa*. They have been found to be naturally infected by *X. fastidiosa* subspecies *fastidiosa* or unknown either in Portugal or in the United States. No new data was retrieved for *X. taiwanensis*.

Compared to the previous version of the database (EFSA, 2023), no additional STs have been identified worldwide. Information on tolerant/resistant status were reported for 73 plant species in 148 publications, with a total number of 780 records.

The overall number of *Xylella* spp. host plants reaches now 451 plant species, 204 genera and 70 families for category A (i.e. plant species positive with at least two detection methods [among: symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation] or positive with one method [either by sequencing or pure culture isolation]), till 712 plant species, 312 genera and 89 families for category E (i.e. all positives plant species reported, regardless of the detection methods).

A further update of the EFSA database on *Xylella* spp. host plants is planned for December 2024 with the aim to provide useful information and scientific support to risk assessors, risk managers and researchers dealing with *Xylella* spp.

Data are available as interactive reports on the Microstrategy platform at the following link: <https://www.efsa.europa.eu/en/microstrategy/xylella>

Raw data and related metadata are published in Zenodo in the EFSA Knowledge Junction community, this report refers to version 10 (<https://doi.org/10.5281/zenodo.1339343>).

ABBREVIATIONS

DCF	Data Collection Framework
EFSA PLH Panel	EFSA Panel on Plant Health
ELISA	enzyme-linked immunosorbent assay
EPPO	European and Mediterranean Plant Protection Organisation
ETL	Extract Transform Load
PCR	polymerase chain reaction
S-DWH	EFSA Scientific Data Warehouse
ST	sequence type

ACKNOWLEDGEMENTS

EFSA wishes to acknowledge the National Research Council, Institute for Sustainable Plant Protection (CNR-IPSP), Bari, Italy, for the support provided to this scientific output in the context of grant Specific Agreement n. 04-2023 under Framework

Partnership Agreement n. GP/EFSA/PLANTS/2022/02 – 02. EFSA wishes to acknowledge Claude Bragard (Chair of EFSA Panel of Plant Health) for reviewing this Scientific Report.

CONFLICT OF INTEREST

If you wish to access the declaration of interests of any expert contributing to an EFSA scientific assessment, please contact interestmanagement@efsa.europa.eu.

REQUESTOR

European Commission

QUESTION NUMBER

EFSA-Q-2023-00890

COPYRIGHT FOR NON-EFSA CONTENT

EFSA may include images or other content for which it does not hold copyright. In such cases, EFSA indicates the copyright holder and users should seek permission to reproduce the content from the original source.

REFERENCES

- Abdelrazek, S., Bush, E., Oliver, C. L., Liu, H., Sharma, P., Aguilera Flores, M., Donegan, M. A., Almeida, R., Nita, M., & Vinatzer, B. (2023). A survey of *Xylella fastidiosa* in the US state of Virginia reveals wide distribution of both subspecies *fastidiosa* and *multiplex* in grapevine. *Phytopathology*, 114(1), 35–46. <https://doi.org/10.1094/PHTO-06-23-0212-R>
- EFSA (European Food Safety Authority). (2010). Application of systematic review methodology to food and feed safety assessments to support decision making. *EFSA Journal*, 8(6), 1637. <https://doi.org/10.2903/j.efsa.2010.1637>
- EFSA (European Food Safety Authority). (2016). Update of a database of host plants of *Xylella fastidiosa*: 20 November 2015. *EFSA Journal*, 14(2), 4378. <https://doi.org/10.2903/j.efsa.2016.4378>
- EFSA (European Food Safety Authority). (2018). Update of the *Xylella* spp. host plant database. *EFSA Journal*, 16(9), 5408. <https://doi.org/10.2903/j.efsa.2018.5408>
- EFSA (European Food Safety Authority), Gibin, D., Gutierrez Linares, A., Fasanelli, E., Pasinato, L., & Delbianco, A. (2023). Update of the *Xylella* spp. host plant database – Systematic literature search up to 30 June 2023. *EFSA Journal*, 21(12), e8477. <https://doi.org/10.2903/j.efsa.2023.8477>
- EPPO. (2023). EPPO Global Database. <https://gd.eppo.int>
- Nita, M., Pfeiffer, D., Hansen, M. A., & Bush, E. (2015). Final report for VA wine board. Project title: Preliminary data collection to understand Pierce's disease ecosystem in VA (14-1693-02). <https://www.vawine.org/research-reports/>
- Schaad, N. W., Postnikova, E., Lacy, G., Fatmi, M., & Chang, C. J. (2004). *Xylella fastidiosa* subspecies: *X. fastidiosa* subsp. *fastidiosa* subsp. nov., *X. fastidiosa* subsp. *multiplex* subsp. nov., and *X. fastidiosa* subsp. *pauca* subsp. nov. *Systematic and Applied Microbiology*, 27(3), 290–300. <https://doi.org/10.1078/0723-2020-00263> Erratum in: *Systematic and Applied Microbiology* 2004 Nov;27(6):763. PMID: 15214634.

How to cite this article: EFSA (European Food Safety Authority), Cavalieri, V., Fasanelli, E., Gibin, D., Gutierrez Linares, A., La Notte, P., Pasinato, L., & Delbianco, A. (2024). Update of the *Xylella* spp. host plant database – Systematic literature search up to 31 December 2023. *EFSA Journal*, 22(7), e8898. <https://doi.org/10.2903/j.efsa.2024.8898>

APPENDIX A

Host plant species naturally infected

List of host plant species, naturally infected, of *X. fastidiosa* subsp. unknown (i.e. not reported in the publication), subsp. *fastidiosa*, subsp. *fastidiosa/sandyi*, subsp. *morus*, subsp. *multiplex*, subsp. *pauca*, subsp. *sandyi*, subsp. *tashke* and *X. taiwanensis* according to categories A, B, C, D, E (as reported in Section 2.4.2):

- A.** Plant species positive with at least two detection methods (among: symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation) or positive with one method (either by sequencing or pure culture isolation).
- B.** The same as point A, but also including microscopy: plant species positive with at least two detection methods (among: microscopy, symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation) or positive with one method (either by sequencing or pure culture isolation).
- C.** Plant species positive with at least one detection method (among: symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation).
- D.** Plant species positive with at least one detection method including microscopy (microscopy, symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation).
- E.** All positives plant species reported, regardless of the detection methods (positive records but without the detection method specified, symptom observations, microscopy, symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing, pure culture isolation).

No.	Plant EPPO code	Plant species	Pest	Category
1	ACADA	Acacia dealbata	Xf subsp. unknown	A
2	ACALO	Acacia longifolia	Xf subsp. unknown	A
3	ACAME	Acacia melanoxylon	Xf subsp. unknown	A
4	ACASA	Acacia saligna	Xf subsp. unknown	A
5	ACRRB	Acer rubrum	Xf subsp. unknown	A
6	ACRSS	Acer sp.	Xf subsp. unknown	A
7	ADCSS	Adenocarpus sp.	Xf subsp. unknown	A
8	AILAL	Ailanthus altissima	Xf subsp. unknown	A
9	ALBJU	Albizia julibrissin	Xf subsp. unknown	A
10	AMARE	Amaranthus retroflexus	Xf subsp. unknown	A
11	AMBPS	Ambrosia psilostachya	Xf subsp. unknown	A
12	AMBTR	Ambrosia trifida	Xf subsp. unknown	A
13	AMCAR	Ampelopsis arborea	Xf subsp. unknown	A
14	AMCBR	Ampelopsis brevipedunculata	Xf subsp. unknown	A
15	AMCBH	Ampelopsis brevipedunculata var. hancei	Xf subsp. unknown	A
16	CC135A	Periwinkle (common name)	Xf subsp. unknown	A
17	ARDUN	Arbutus unedo	Xf subsp. unknown	A
18	CHYFR	Argyranthemum frutescens	Xf subsp. unknown	A
19	ASPAC	Asparagus acutifolius	Xf subsp. unknown	A
20	BACHA	Baccharis halimifolia	Xf subsp. unknown	A
21	BACSS	Baccharis sp.	Xf subsp. unknown	A
22	BRSSS	Brassica sp.	Xf subsp. unknown	A
23	CLIAM	Callicarpa americana	Xf subsp. unknown	A
24	CUNVU	Calluna vulgaris	Xf subsp. unknown	A
25	CYAAQ	Carya aquatica	Xf subsp. unknown	A
26	CYACA	Carya cathayensis	Xf subsp. unknown	A
27	CYACO	Carya cordiformis	Xf subsp. unknown	A
28	CYAFL	Carya floridana	Xf subsp. unknown	A
29	CYAGL	Carya glabra	Xf subsp. unknown	A

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
30	CYAIL	<i>Carya illinoensis</i>	Xf subsp. unknown	A
31	CYALA	<i>Carya laciniosa</i>	Xf subsp. unknown	A
32	CYAPA	<i>Carya pallida</i>	Xf subsp. unknown	A
33	CC275A	<i>Carya palmeri</i>	Xf subsp. unknown	A
34	CYATO	<i>Carya tomentosa</i>	Xf subsp. unknown	A
35	CSNSA	<i>Castanea sativa</i>	Xf subsp. unknown	A
36	CTURO	<i>Catharanthus roseus</i>	Xf subsp. unknown	A
37	CCSOC	<i>Cercis occidentalis</i>	Xf subsp. unknown	A
38	CASFA	<i>Chamaecrista fasciculata</i>	Xf subsp. unknown	A
39	CIORE	<i>Chionanthus retusus</i>	Xf subsp. unknown	A
40	CXKTA	<i>Chitalpa tashkentensis</i>	Xf subsp. unknown	A
41	CSTIC	<i>Cistus creticus</i>	Xf subsp. unknown	A
42	CIDAU	<i>Citrus aurantium</i>	Xf subsp. unknown	A
43	CIDCE	<i>Citrus celebica</i>	Xf subsp. unknown	A
44	CIDJA	<i>Citrus jambhiri</i>	Xf subsp. unknown	A
45	CIDLI	<i>Citrus limon</i>	Xf subsp. unknown	A
46	CIDME	<i>Citrus medica</i>	Xf subsp. unknown	A
47	CIDNA	<i>Citrus natsudaikai</i>	Xf subsp. unknown	A
48	CIDPA	<i>Citrus paradisi</i>	Xf subsp. unknown	A
49	CIDRE	<i>Citrus reticulata</i>	Xf subsp. unknown	A
50	CIDSI	<i>Citrus sinensis</i>	Xf subsp. unknown	A
51	CIDSS	<i>Citrus</i> sp.	Xf subsp. unknown	A
52	CIDTG	<i>Citrus tangerina</i>	Xf subsp. unknown	A
53	CIDNO	<i>Citrus × nobilis</i>	Xf subsp. unknown	A
54	CIDRP	<i>Citrus × tangelo</i>	Xf subsp. unknown	A
55	CGACY	<i>Coelorachis cylindrica</i>	Xf subsp. unknown	A
56	COFAR	<i>Coffea arabica</i>	Xf subsp. unknown	A
57	COFSS	<i>Coffea</i> sp.	Xf subsp. unknown	A
58	CQMAL	<i>Coleonema album</i>	Xf subsp. unknown	A
59	COIMA	<i>Conium maculatum</i>	Xf subsp. unknown	A
60	CDTSE	<i>Cortaderia selloana</i>	Xf subsp. unknown	A
61	CZSMU	<i>Cytisus multiflorus</i>	Xf subsp. unknown	A
62	SAOSC	<i>Cytisus scoparius</i>	Xf subsp. unknown	A
63	CZSSS	<i>Cytisus</i> sp.	Xf subsp. unknown	A
64	CZSST	<i>Cytisus striatus</i>	Xf subsp. unknown	A
65	DIGSS	<i>Digitaria</i> sp.	Xf subsp. unknown	A
66	DOSKA	<i>Diospyros kaki</i>	Xf subsp. unknown	A
67	DPYPA	<i>Diplocyclos palmatus</i>	Xf subsp. unknown	A
68	DODVI	<i>Dodonaea viscosa</i>	Xf subsp. unknown	A
69	ECSLU	<i>Echinopartum lusitanicum</i>	Xf subsp. unknown	A
70	EHIPL	<i>Echium plantagineum</i>	Xf subsp. unknown	A
71	EPHTE	<i>Euphorbia terracina</i>	Xf subsp. unknown	A
72	EYOCH	<i>Euryops chrysanthemoides</i>	Xf subsp. unknown	A
73	FAUCR	<i>Fagus crenata</i>	Xf subsp. unknown	A
74	FATJA	<i>Fatsia japonica</i>	Xf subsp. unknown	A
75	FIUCA	<i>Ficus carica</i>	Xf subsp. unknown	A
76	RHAFR	<i>Frangula alnus</i>	Xf subsp. unknown	A
77	FRXAN	<i>Fraxinus angustifolia</i>	Xf subsp. unknown	A
78	FRXPE	<i>Fraxinus pennsylvanica</i>	Xf subsp. unknown	A
79	GENTR	<i>Genista triacanthos</i>	Xf subsp. unknown	A

(Continues)

(Continued)

No.	Plant EPP0 code	Plant species	Pest	Category
80	QEMTR	<i>Genista tridentata</i>	Xf subsp. unknown	A
81	GIKBI	<i>Ginkgo biloba</i>	Xf subsp. unknown	A
82	CC278A	<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Xf subsp. unknown	A
83	GREJU	<i>Grevillea juniperina</i>	Xf subsp. unknown	A
84	HAICO	<i>Halimium calycinum</i>	Xf subsp. unknown	A
85	HAILA	<i>Halimium lasianthum</i>	Xf subsp. unknown	A
86	HAI0C	<i>Halimium ocymoides</i>	Xf subsp. unknown	A
87	HAISS	<i>Halimium</i> sp.	Xf subsp. unknown	A
88	HELAN	<i>Helianthus annuus</i>	Xf subsp. unknown	A
89	HECST	<i>Helichrysum stoechas</i>	Xf subsp. unknown	A
90	HEGSS	<i>Hemerocallis</i> sp.	Xf subsp. unknown	A
91	HIBSH	<i>Hibiscus schizopetalus</i>	Xf subsp. unknown	A
92	HIBSY	<i>Hibiscus syriacus</i>	Xf subsp. unknown	A
93	HUMJA	<i>Humulus scandens</i>	Xf subsp. unknown	A
94	ILEVO	<i>Ilex vomitoria</i>	Xf subsp. unknown	A
95	IVAAN	<i>Iva annua</i>	Xf subsp. unknown	A
96	IACMI	<i>Jacaranda mimosifolia</i>	Xf subsp. unknown	A
97	IUGRE	<i>Juglans regia</i>	Xf subsp. unknown	A
98	IUPAS	<i>Juniperus ashei</i>	Xf subsp. unknown	A
99	LAEIN	<i>Lagerstroemia indica</i>	Xf subsp. unknown	A
100	LAESS	<i>Lagerstroemia</i> sp.	Xf subsp. unknown	A
101	LURNO	<i>Laurus nobilis</i>	Xf subsp. unknown	A
102	LAVAN	<i>Lavandula angustifolia</i>	Xf subsp. unknown	A
103	LAVDE	<i>Lavandula dentata</i>	Xf subsp. unknown	A
104	LAVST	<i>Lavandula stoechas</i>	Xf subsp. unknown	A
105	LIGLU	<i>Ligustrum lucidum</i>	Xf subsp. unknown	A
106	LIQST	<i>Liquidambar styraciflua</i>	Xf subsp. unknown	A
107	LONJA	<i>Lonicera japonica</i>	Xf subsp. unknown	A
108	LUPAD	<i>Lupinus aridorum</i>	Xf subsp. unknown	A
109	LUPVI	<i>Lupinus villosus</i>	Xf subsp. unknown	A
110	MAGGR	<i>Magnolia grandiflora</i>	Xf subsp. unknown	A
111	MLLPA	<i>Mallotus paniculatus</i>	Xf subsp. unknown	A
112	MEDSA	<i>Medicago sativa</i>	Xf subsp. unknown	A
113	MIMSS	<i>Mimosa</i> sp.	Xf subsp. unknown	A
114	MODCA	<i>Modiola caroliniana</i>	Xf subsp. unknown	A
115	MORAL	<i>Morus alba</i>	Xf subsp. unknown	A
116	MORRU	<i>Morus rubra</i>	Xf subsp. unknown	A
117	MORSS	<i>Morus</i> sp.	Xf subsp. unknown	A
118	MYMIN	<i>Myoporum insulare</i>	Xf subsp. unknown	A
119	MYVCO	<i>Myrtus communis</i>	Xf subsp. unknown	A
120	NANDO	<i>Nandina domestica</i>	Xf subsp. unknown	A
121	NPTLU	<i>Neptunia lutea</i>	Xf subsp. unknown	A
122	NEROL	<i>Nerium oleander</i>	Xf subsp. unknown	A
123	OLVEU	<i>Olea europaea</i>	Xf subsp. unknown	A
124	OLVES	<i>Olea europaea</i> subsp. <i>sylvestris</i>	Xf subsp. unknown	A
125	OLVSS	<i>Olea</i> sp.	Xf subsp. unknown	A
126	PRTQU	<i>Parthenocissus quinquefolia</i>	Xf subsp. unknown	A
127	PASDI	<i>Paspalum dilatatum</i>	Xf subsp. unknown	A
128	PEBAM	<i>Persea americana</i>	Xf subsp. unknown	A
129	PHXRE	<i>Phoenix reclinata</i>	Xf subsp. unknown	A
130	PHXRO	<i>Phoenix roebelenii</i>	Xf subsp. unknown	A

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
131	PIUTD	<i>Pinus taeda</i>	Xf subsp. unknown	A
132	PLTOC	<i>Platanus occidentalis</i>	Xf subsp. unknown	A
133	PLTSS	<i>Platanus</i> sp.	Xf subsp. unknown	A
134	POGMY	<i>Polygala myrtifolia</i>	Xf subsp. unknown	A
135	PRNAV	<i>Prunus avium</i>	Xf subsp. unknown	A
136	PRNCF	<i>Prunus cerasifera</i>	Xf subsp. unknown	A
137	CC209A	<i>Prunus cerasifera</i> × <i>P. munsoniana</i>	Xf subsp. unknown	A
138	PRNDU	<i>Prunus dulcis</i>	Xf subsp. unknown	A
139	PRNPS	<i>Prunus persica</i>	Xf subsp. unknown	A
140	PRNSC	<i>Prunus salicina</i>	Xf subsp. unknown	A
141	PRNSS	<i>Prunus</i> sp.	Xf subsp. unknown	A
142	PTEAQ	<i>Pteridium aquilinum</i>	Xf subsp. unknown	A
143	PYECO	<i>Pyracantha coccinea</i>	Xf subsp. unknown	A
144	PYUPY	<i>Pyrus pyrifolia</i>	Xf subsp. unknown	A
145	PYUSS	<i>Pyrus</i> sp.	Xf subsp. unknown	A
146	QUECO	<i>Quercus coccinea</i>	Xf subsp. unknown	A
147	QUEFC	<i>Quercus falcata</i>	Xf subsp. unknown	A
148	QUELA	<i>Quercus laevis</i>	Xf subsp. unknown	A
149	QUELF	<i>Quercus laurifolia</i>	Xf subsp. unknown	A
150	QUENI	<i>Quercus nigra</i>	Xf subsp. unknown	A
151	QUEPA	<i>Quercus palustris</i>	Xf subsp. unknown	A
152	QUEPN	<i>Quercus pyrenaica</i>	Xf subsp. unknown	A
153	QUERO	<i>Quercus robur</i>	Xf subsp. unknown	A
154	QUERU	<i>Quercus rubra</i>	Xf subsp. unknown	A
155	QUESS	<i>Quercus</i> sp.	Xf subsp. unknown	A
156	QUESU	<i>Quercus suber</i>	Xf subsp. unknown	A
157	QUEVE	<i>Quercus velutina</i>	Xf subsp. unknown	A
158	QUEVI	<i>Quercus virginiana</i>	Xf subsp. unknown	A
159	RATCO	<i>Ratibida columnifera</i>	Xf subsp. unknown	A
160	RHAAL	<i>Rhamnus alaternus</i>	Xf subsp. unknown	A
161	RHUSS	<i>Rhus</i> sp.	Xf subsp. unknown	A
162	RUBHP	<i>Rubus hedycarpus</i> subsp. <i>procerus</i>	Xf subsp. unknown	A
163	RUBSS	<i>Rubus</i> sp.	Xf subsp. unknown	A
164	RUBUL	<i>Rubus ulmifolius</i>	Xf subsp. unknown	A
165	SAXAT	<i>Salix atrocinerea</i>	Xf subsp. unknown	A
166	RMSOF	<i>Salvia rosmarinus</i>	Xf subsp. unknown	A
167	SAMCN	<i>Sambucus canadensis</i>	Xf subsp. unknown	A
168	SAMNI	<i>Sambucus nigra</i>	Xf subsp. unknown	A
169	SSAAL	<i>Sassafras albidum</i>	Xf subsp. unknown	A
170	SSASS	<i>Sassafras</i> sp.	Xf subsp. unknown	A
171	SETMG	<i>Setaria magna</i>	Xf subsp. unknown	A
172	SOOFI	<i>Solidago fistulosa</i>	Xf subsp. unknown	A
173	SPUJU	<i>Spartium junceum</i>	Xf subsp. unknown	A
174	SWTPS	<i>Stewartia pseudocamellia</i>	Xf subsp. unknown	A
175	ZMYDI	<i>Symphytotrichum divaricatum</i>	Xf subsp. unknown	A
176	TRFRE	<i>Trifolium repens</i>	Xf subsp. unknown	A
177	ULEEU	<i>Ulex europaeus</i>	Xf subsp. unknown	A
178	ULEMC	<i>Ulex micranthus</i>	Xf subsp. unknown	A
179	ULEMI	<i>Ulex minor</i>	Xf subsp. unknown	A

(Continues)

(Continued)

No.	Plant Eppo code	Plant species	Pest	Category
180	ULESS	<i>Ulex</i> sp.	Xf subsp. unknown	A
181	ULMAM	<i>Ulmus americana</i>	Xf subsp. unknown	A
182	ULMGL	<i>Ulmus glabra</i>	Xf subsp. unknown	A
183	ULMPU	<i>Ulmus pumila</i>	Xf subsp. unknown	A
184	ULMSS	<i>Ulmus</i> sp.	Xf subsp. unknown	A
185	VACAH	<i>Vaccinium ashei</i>	Xf subsp. unknown	A
186	VACCO	<i>Vaccinium corymbosum</i>	Xf subsp. unknown	A
187	VACSS	<i>Vaccinium</i> sp.	Xf subsp. unknown	A
188	VACVG	<i>Vaccinium virgatum</i>	Xf subsp. unknown	A
189	VINMA	<i>Vinca major</i>	Xf subsp. unknown	A
190	VINMI	<i>Vinca minor</i>	Xf subsp. unknown	A
191	VITCL	<i>Vitis californica</i>	Xf subsp. unknown	A
192	VITCA	<i>Vitis candicans</i>	Xf subsp. unknown	A
193	VITLA	<i>Vitis labrusca</i>	Xf subsp. unknown	A
194	CC241A	<i>Vitis labrusca</i> × <i>V. vinifera</i>	Xf subsp. unknown	A
195	VITMU	<i>Vitis munsoniana</i>	Xf subsp. unknown	A
196	CC242A	<i>Vitis muscadina</i>	Xf subsp. unknown	A
197	VITRI	<i>Vitis riparia</i>	Xf subsp. unknown	A
198	VITRF	<i>Vitis rotundifolia</i>	Xf subsp. unknown	A
199	VITSS	<i>Vitis</i> sp.	Xf subsp. unknown	A
200	VITVI	<i>Vitis vinifera</i>	Xf subsp. unknown	A
201	ACRSC	<i>Acer saccharum</i>	Xf subsp. unknown	B
202	CYPER	<i>Cyperus eragrostis</i>	Xf subsp. unknown	B
203	HVEBR	<i>Hevea brasiliensis</i>	Xf subsp. unknown	B
204	PRNDO	<i>Prunus domestica</i>	Xf subsp. unknown	B
205	SORHA	<i>Sorghum halepense</i>	Xf subsp. unknown	B
206	ACRMA	<i>Acer macrophyllum</i>	Xf subsp. unknown	C
207	ACRNE	<i>Acer negundo</i>	Xf subsp. unknown	C
208	ACRPL	<i>Acer platanooides</i>	Xf subsp. unknown	C
209	AECHY	<i>Aesculus</i> × <i>hybrida</i>	Xf subsp. unknown	C
210	AGTAU	<i>Agathis australis</i>	Xf subsp. unknown	C
211	AGSGI	<i>Agrostis gigantea</i>	Xf subsp. unknown	C
212	AEYEX	<i>Alectryon excelsus</i>	Xf subsp. unknown	C
213	ALRFI	<i>Alternanthera ficoidea</i>	Xf subsp. unknown	C
214	AMASS	<i>Amaranthus</i> sp.	Xf subsp. unknown	C
215	BRODI	<i>Anisantha diandra</i>	Xf subsp. unknown	C
216	BRORI	<i>Anisantha rigida</i>	Xf subsp. unknown	C
217	ARYSS	<i>Arctostaphylos</i> sp.	Xf subsp. unknown	C
218	ARTDO	<i>Artemisia douglasiana</i>	Xf subsp. unknown	C
219	ATXSS	<i>Atriplex</i> sp.	Xf subsp. unknown	C
220	AVEFA	<i>Avena fatua</i>	Xf subsp. unknown	C
221	AXOCO	<i>Axonopus compressus</i>	Xf subsp. unknown	C
222	BACPI	<i>Baccharis pilularis</i>	Xf subsp. unknown	C
223	BIDPI	<i>Bidens pilosa</i>	Xf subsp. unknown	C
224	BOEDI	<i>Boerhavia diffusa</i>	Xf subsp. unknown	C
225	BOILF	<i>Borreria latifolia</i>	Xf subsp. unknown	C
226	BRADC	<i>Brachiaria decumbens</i>	Xf subsp. unknown	C
227	BRAPL	<i>Brachiaria plantaginea</i>	Xf subsp. unknown	C
228	BRGSS	<i>Brachyglottis</i> sp.	Xf subsp. unknown	C
229	BROSS	<i>Bromus</i> sp.	Xf subsp. unknown	C
230	BRNPA	<i>Broussonetia papyrifera</i>	Xf subsp. unknown	C

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
231	CCOSS	Calicotome sp.	Xf subsp. unknown	C
232	BLABI	Calyptocarpus biaristatus	Xf subsp. unknown	C
233	CMIRA	Campsis radicans	Xf subsp. unknown	C
234	CAPBP	Capsella bursa-pastoris	Xf subsp. unknown	C
235	CRXSS	Carex sp.	Xf subsp. unknown	C
236	CIPCA	Carpinus caroliniana	Xf subsp. unknown	C
237	CELOR	Celastrus orbiculatus	Xf subsp. unknown	C
238	CETSS	Celtis sp.	Xf subsp. unknown	C
239	CCHEC	Cenchrus echinatus	Xf subsp. unknown	C
240	CHEMU	Chenopodium murale	Xf subsp. unknown	C
241	CHRHA	Chloris halophila	Xf subsp. unknown	C
242	CC158A	Coffea arabica × C. canephora	Xf subsp. unknown	C
243	CC159A	Coffea arabica × C. eugenioides	Xf subsp. unknown	C
244	CC161A	Coffea arabica × C. liberica var. dewevrei	Xf subsp. unknown	C
245	CC162A	Coffea arabica × C. racemosa	Xf subsp. unknown	C
246	COFCA	Coffea canephora	Xf subsp. unknown	C
247	RDGVE	Coffea racemosa	Xf subsp. unknown	C
248	CC164A	Coffea eugenioides	Xf subsp. unknown	C
249	CC165A	Coffea kapakata	Xf subsp. unknown	C
250	COFEX	Coffea liberica var. dewevrei	Xf subsp. unknown	C
251	COFST	Coffea stenophylla	Xf subsp. unknown	C
252	COMBE	Commelina benghalensis	Xf subsp. unknown	C
253	COMER	Commelina erecta	Xf subsp. unknown	C
254	CONAR	Convolvulus arvensis	Xf subsp. unknown	C
255	CPMRE	Coprosma repens	Xf subsp. unknown	C
256	CPMRO	Coprosma robusta	Xf subsp. unknown	C
257	CDLAU	Cordyline australis	Xf subsp. unknown	C
258	CDLSS	Cordyline sp.	Xf subsp. unknown	C
259	CRWFL	Cornus florida	Xf subsp. unknown	C
260	CKICO	Corokia cotoneaster	Xf subsp. unknown	C
261	CKIMA	Corokia macrocarpa	Xf subsp. unknown	C
262	CKISS	Corokia sp.	Xf subsp. unknown	C
263	CCKLA	Corynocarpus laevigatus	Xf subsp. unknown	C
264	ERMSE	Croton setigerus	Xf subsp. unknown	C
265	CYNDA	Cynodon dactylon	Xf subsp. unknown	C
266	CYPSS	Cyperus sp.	Xf subsp. unknown	C
267	DATWR	Datura wrightii	Xf subsp. unknown	C
268	DIGHO	Digitaria horizontalis	Xf subsp. unknown	C
269	TRCIN	Digitaria insularis	Xf subsp. unknown	C
270	DIGSA	Digitaria sanguinalis	Xf subsp. unknown	C
271	DUTPL	Duranta erecta	Xf subsp. unknown	C
272	CHEAM	Dysphania ambrosioides	Xf subsp. unknown	C
273	ECHCG	Echinochloa crus-galli	Xf subsp. unknown	C
274	ELEIN	Eleusine indica	Xf subsp. unknown	C
275	ERICA	Erigeron canadensis	Xf subsp. unknown	C
276	ERBCO	Eriochloa contracta	Xf subsp. unknown	C
277	ERGSS	Eriogonum sp.	Xf subsp. unknown	C
278	EROBO	Erodium botrys	Xf subsp. unknown	C
279	EROMO	Erodium moschatum	Xf subsp. unknown	C
280	EROSS	Erodium sp.	Xf subsp. unknown	C

(Continues)

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
281	ESABI	Escallonia bifida	Xf subsp. unknown	C
282	EUCSS	Eucalyptus sp.	Xf subsp. unknown	C
283	EPHHI	Euphorbia hirta	Xf subsp. unknown	C
284	FACAP	Facelis retusa	Xf subsp. unknown	C
285	CC180A	Fragaria vesca subsp. californica	Xf subsp. unknown	C
286	FRXDI	Fraxinus dipetala	Xf subsp. unknown	C
287	FUCMA	Fuchsia magellanica	Xf subsp. unknown	C
288	GERDI	Geranium dissectum	Xf subsp. unknown	C
289	HAGER	Haloragis erecta	Xf subsp. unknown	C
290	HBESS	Hebe sp.	Xf subsp. unknown	C
291	HEEHE	Hedera helix	Xf subsp. unknown	C
292	HECIT	Helichrysum italicum	Xf subsp. unknown	C
293	HEOFR	Heliotropium fruticosum	Xf subsp. unknown	C
294	HEOIN	Heliotropium indicum	Xf subsp. unknown	C
295	HTTGR	Heterotheca grandiflora	Xf subsp. unknown	C
296	HORMU	Hordeum murinum	Xf subsp. unknown	C
297	HYEPA	Hydrangea paniculata	Xf subsp. unknown	C
298	HRYBR	Hypochaeris brasiliensis	Xf subsp. unknown	C
299	IPOFI	Ipomoea fistulosa	Xf subsp. unknown	C
300	LACSE	Lactuca serriola	Xf subsp. unknown	C
301	LECSI	Leonurus sibiricus	Xf subsp. unknown	C
302	LEPAU	Lepidium auriculatum	Xf subsp. unknown	C
303	COPDI	Lepidium didymum	Xf subsp. unknown	C
304	LEPRU	Lepidium ruderales	Xf subsp. unknown	C
305	LIGSI	Ligustrum sinense	Xf subsp. unknown	C
306	CC189A	Ligustrum virginicum	Xf subsp. unknown	C
307	LIRTU	Liriodendron tulipifera	Xf subsp. unknown	C
308	LOLMU	Lolium multiflorum	Xf subsp. unknown	C
309	LOLPE	Lolium perenne	Xf subsp. unknown	C
310	LUDUR	Ludwigia grandiflora	Xf subsp. unknown	C
311	MALPA	Malva parviflora	Xf subsp. unknown	C
312	MAQVU	Marrubium vulgare	Xf subsp. unknown	C
313	MEDPO	Medicago polymorpha	Xf subsp. unknown	C
314	MLQTE	Melicope ternata	Xf subsp. unknown	C
315	MLYRA	Melicytus ramiflorus	Xf subsp. unknown	C
316	MEUSS	Melilotus sp.	Xf subsp. unknown	C
317	MLSOF	Melissa officinalis	Xf subsp. unknown	C
318	MRRMA	Merremia macrocalyx	Xf subsp. unknown	C
319	MRYSI	Meryta sinclairii	Xf subsp. unknown	C
320	MTDEX	Metrosideros excelsa	Xf subsp. unknown	C
321	MTDSS	Metrosideros sp.	Xf subsp. unknown	C
322	CC195A	Metrosideros kermadecensis	Xf subsp. unknown	C
323	MNTLI	Montiastrum lineare	Xf subsp. unknown	C
324	MYMLA	Myoporum laetum	Xf subsp. unknown	C
325	MAJHO	Origanum majorana	Xf subsp. unknown	C
326	DKTAC	Panicum acuminatum	Xf subsp. unknown	C
327	PTNHY	Parthenium hysterophorus	Xf subsp. unknown	C
328	PRTRR	Parthenocissus tricuspidata	Xf subsp. unknown	C
329	PASUR	Paspalum urvillei	Xf subsp. unknown	C
330	CC200A	Paspalum regnellii	Xf subsp. unknown	C
331	PAQFO	Passiflora foetida	Xf subsp. unknown	C

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
332	PESCL	<i>Pennisetum clandestinum</i>	Xf subsp. unknown	C
333	POLLA	<i>Persicaria lapathifolia</i>	Xf subsp. unknown	C
334	POLPE	<i>Persicaria maculosa</i>	Xf subsp. unknown	C
335	PGASA	<i>Phagnalon saxatile</i>	Xf subsp. unknown	C
336	PHAAN	<i>Phalaris angusta</i>	Xf subsp. unknown	C
337	PHXSS	<i>Phoenix</i> sp.	Xf subsp. unknown	C
338	PHMCO	<i>Phormium colensoi</i>	Xf subsp. unknown	C
339	PHMTE	<i>Phormium tenax</i>	Xf subsp. unknown	C
340	PTUCR	<i>Pittosporum crassifolium</i>	Xf subsp. unknown	C
341	PTUEU	<i>Pittosporum eugenioides</i>	Xf subsp. unknown	C
342	PTUTE	<i>Pittosporum tenuifolium</i>	Xf subsp. unknown	C
343	PTUUM	<i>Pittosporum umbellatum</i>	Xf subsp. unknown	C
344	PLALA	<i>Plantago lanceolata</i>	Xf subsp. unknown	C
345	PLAMA	<i>Plantago major</i>	Xf subsp. unknown	C
346	PLUOD	<i>Pluchea odorata</i>	Xf subsp. unknown	C
347	POAAN	<i>Poa annua</i>	Xf subsp. unknown	C
348	POLAR	<i>Polygonum arenastrum</i>	Xf subsp. unknown	C
349	POROL	<i>Portulaca oleracea</i>	Xf subsp. unknown	C
350	PRNAN	<i>Prunus angustifolia</i>	Xf subsp. unknown	C
351	PRNCM	<i>Prunus campanulata</i>	Xf subsp. unknown	C
352	PRNLR	<i>Prunus laurocerasus</i>	Xf subsp. unknown	C
353	PRNMM	<i>Prunus mume</i>	Xf subsp. unknown	C
354	PRNSO	<i>Prunus serotina</i>	Xf subsp. unknown	C
355	PRNSL	<i>Prunus serrulata</i>	Xf subsp. unknown	C
356	CC214A	<i>Prunus simonii</i> × <i>P. salicina</i> × <i>P. cerasifera</i> × <i>P. munsoniana</i>	Xf subsp. unknown	C
357	QUEAG	<i>Quercus agrifolia</i>	Xf subsp. unknown	C
358	QUEAL	<i>Quercus alba</i>	Xf subsp. unknown	C
359	QUEIL	<i>Quercus ilex</i>	Xf subsp. unknown	C
360	QUEIM	<i>Quercus imbricaria</i>	Xf subsp. unknown	C
361	QUEIN	<i>Quercus incana</i>	Xf subsp. unknown	C
362	QUEMC	<i>Quercus macrocarpa</i>	Xf subsp. unknown	C
363	QUEPH	<i>Quercus phellos</i>	Xf subsp. unknown	C
364	QUEPR	<i>Quercus prinus</i>	Xf subsp. unknown	C
365	RANRE	<i>Ranunculus repens</i>	Xf subsp. unknown	C
366	RAPSR	<i>Raphanus sativus</i>	Xf subsp. unknown	C
367	RHUDI	<i>Rhus diversiloba</i>	Xf subsp. unknown	C
368	RCHSS	<i>Richardia</i> sp.	Xf subsp. unknown	C
369	ROSCA	<i>Rosa californica</i>	Xf subsp. unknown	C
370	RUBUR	<i>Rubus ursinus</i>	Xf subsp. unknown	C
371	RUBVI	<i>Rubus vitifolius</i>	Xf subsp. unknown	C
372	RUMCR	<i>Rumex crispus</i>	Xf subsp. unknown	C
373	RUMSS	<i>Rumex</i> sp.	Xf subsp. unknown	C
374	SAXSS	<i>Salix</i> sp.	Xf subsp. unknown	C
375	SASKT	<i>Salsola kali</i> subsp. <i>tragus</i>	Xf subsp. unknown	C
376	SALOF	<i>Salvia officinalis</i>	Xf subsp. unknown	C
377	SAMGL	<i>Sambucus cerulea</i>	Xf subsp. unknown	C
378	SNTMA	<i>Santolina magonica</i>	Xf subsp. unknown	C
379	SENGB	<i>Senecio grisebachii</i>	Xf subsp. unknown	C
380	SENVU	<i>Senecio vulgaris</i>	Xf subsp. unknown	C
381	CC221A	<i>Senna secundiflora</i>	Xf subsp. unknown	C

(Continues)

(Continued)

No.	Plant Eppo code	Plant species	Pest	Category
382	SIDRH	<i>Sida rhombifolia</i>	Xf subsp. unknown	C
383	SLYMA	<i>Silybum marianum</i>	Xf subsp. unknown	C
384	SSYIR	<i>Sisymbrium irio</i>	Xf subsp. unknown	C
385	SOLAM	<i>Solanum americanum</i>	Xf subsp. unknown	C
386	SONOL	<i>Sonchus oleraceus</i>	Xf subsp. unknown	C
387	SONSS	<i>Sonchus</i> sp.	Xf subsp. unknown	C
388	SOBSE	<i>Sophora secundiflora</i>	Xf subsp. unknown	C
389	STAAR	<i>Stachys arvensis</i>	Xf subsp. unknown	C
390	STEME	<i>Stellaria media</i>	Xf subsp. unknown	C
391	SYZPA	<i>Syzygium paniculatum</i>	Xf subsp. unknown	C
392	TALPA	<i>Talinum paniculatum</i>	Xf subsp. unknown	C
393	TAROF	<i>Taraxacum officinale</i>	Xf subsp. unknown	C
394	TRFIN	<i>Trifolium incarnatum</i>	Xf subsp. unknown	C
395	ULEPA	<i>Ulex parviflorus</i>	Xf subsp. unknown	C
396	URLTY	<i>Urtica dioica</i> subsp. <i>gracilis</i>	Xf subsp. unknown	C
397	URTUR	<i>Urtica urens</i>	Xf subsp. unknown	C
398	VEBLI	<i>Verbena litoralis</i>	Xf subsp. unknown	C
399	VENSS	<i>Vernonia</i> sp.	Xf subsp. unknown	C
400	VERPE	<i>Veronica persica</i>	Xf subsp. unknown	C
401	VERSS	<i>Veronica</i> sp.	Xf subsp. unknown	C
402	CC226A	<i>Vicia ludoviciana</i>	Xf subsp. unknown	C
403	VIXLU	<i>Vitex lucens</i>	Xf subsp. unknown	C
404	VITAZ	<i>Vitis arizonica</i>	Xf subsp. unknown	C
405	VITGI	<i>Vitis girdiana</i>	Xf subsp. unknown	C
406	WSTFR	<i>Wisteria frutescens</i>	Xf subsp. unknown	C
407	XANSP	<i>Xanthium spinosum</i>	Xf subsp. unknown	C
408	CIDLO	<i>Citrus × limonia</i>	Xf subsp. unknown	D
409	COFLI	<i>Coffea liberica</i>	Xf subsp. unknown	D
410	PRNAM	<i>Prunus americana</i>	Xf subsp. unknown	D
411	PRNMS	<i>Prunus munsoniana</i>	Xf subsp. unknown	D
412	PRNSI	<i>Prunus simonii</i>	Xf subsp. unknown	D
413	SOOCA	<i>Solidago canadensis</i>	Xf subsp. unknown	D
414	PRNAR	<i>Prunus armeniaca</i>	Xf subsp. unknown	E
415	PRNH0	<i>Prunus hortulana</i>	Xf subsp. unknown	E
416	PRNME	<i>Prunus mexicana</i>	Xf subsp. unknown	E
417	ULMHO	<i>Ulmus × hollandica</i>	Xf subsp. unknown	E
418	VITAE	<i>Vitis aestivalis</i>	Xf subsp. unknown	E
419	VITBQ	<i>Vitis bourquiniana</i>	Xf subsp. unknown	E
420	VITCI	<i>Vitis cinerea</i>	Xf subsp. unknown	E
421	VITCN	<i>Vitis simpsonii</i>	Xf subsp. unknown	E
422	VITCH	<i>Vitis × champinii</i>	Xf subsp. unknown	E
423	CC256A	<i>Vitis rufotomentosa</i>	Xf subsp. unknown	E
424	CC257A	<i>Vitis shuttleworthii</i>	Xf subsp. unknown	E
No.	Plant Eppo code	Plant species	Pest	Category
1	ACADA	<i>Acacia dealbata</i>	Xf subsp. <i>fastidiosa</i>	A
2	ACRSS	<i>Acer</i> sp.	Xf subsp. <i>fastidiosa</i>	A
3	AMBEL	<i>Ambrosia artemisiifolia</i>	Xf subsp. <i>fastidiosa</i>	A
4	CCOSP	<i>Calicotome spinosa</i>	Xf subsp. <i>fastidiosa</i>	A
5	CCSOC	<i>Cercis occidentalis</i>	Xf subsp. <i>fastidiosa</i>	A
6	CSTPS	<i>Cistus inflatus</i>	Xf subsp. <i>fastidiosa</i>	A
7	CSTLA	<i>Cistus ladanifer</i>	Xf subsp. <i>fastidiosa</i>	A

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
8	CSTMO	<i>Cistus monspeliensis</i>	Xf subsp. fastidiosa	A
9	CSTSS	<i>Cistus</i> sp.	Xf subsp. fastidiosa	A
10	CIDLI	<i>Citrus limon</i>	Xf subsp. fastidiosa	A
11	CIDPA	<i>Citrus paradisi</i>	Xf subsp. fastidiosa	A
12	CIDRE	<i>Citrus reticulata</i>	Xf subsp. fastidiosa	A
13	CIDSI	<i>Citrus sinensis</i>	Xf subsp. fastidiosa	A
14	COFAR	<i>Coffea arabica</i>	Xf subsp. fastidiosa	A
15	COFCA	<i>Coffea canephora</i>	Xf subsp. fastidiosa	A
16	COFSS	<i>Coffea</i> sp.	Xf subsp. fastidiosa	A
17	CZSST	<i>Cytisus striatus</i>	Xf subsp. fastidiosa	A
18	ELGAN	<i>Elaeagnus angustifolia</i>	Xf subsp. fastidiosa	A
19	CC270A	<i>Erysimum</i> hybrids	Xf subsp. fastidiosa	A
20	FIUCA	<i>Ficus carica</i>	Xf subsp. fastidiosa	A
21	FRXAN	<i>Fraxinus angustifolia</i>	Xf subsp. fastidiosa	A
22	GENLU	<i>Genista lucida</i>	Xf subsp. fastidiosa	A
23	IUGRE	<i>Juglans regia</i>	Xf subsp. fastidiosa	A
24	LIQST	<i>Liquidambar styraciflua</i>	Xf subsp. fastidiosa	A
25	LUPAD	<i>Lupinus aridorum</i>	Xf subsp. fastidiosa	A
26	MAGGR	<i>Magnolia grandiflora</i>	Xf subsp. fastidiosa	A
27	MEDSA	<i>Medicago sativa</i>	Xf subsp. fastidiosa	A
28	MTDSS	<i>Metrosideros</i> sp.	Xf subsp. fastidiosa	A
29	MORSS	<i>Morus</i> sp.	Xf subsp. fastidiosa	A
30	MYVCO	<i>Myrtus communis</i>	Xf subsp. fastidiosa	A
31	NEROL	<i>Nerium oleander</i>	Xf subsp. fastidiosa	A
32	PELGV	<i>Pelargonium graveolens</i>	Xf subsp. fastidiosa	A
33	PLUOD	<i>Pluchea odorata</i>	Xf subsp. fastidiosa	A
34	POGMY	<i>Polygala myrtifolia</i>	Xf subsp. fastidiosa	A
35	PRNAV	<i>Prunus avium</i>	Xf subsp. fastidiosa	A
36	PRNDU	<i>Prunus dulcis</i>	Xf subsp. fastidiosa	A
37	PRNPS	<i>Prunus persica</i>	Xf subsp. fastidiosa	A
38	PRNSS	<i>Prunus</i> sp.	Xf subsp. fastidiosa	A
39	PSISS	<i>Psidium</i> sp.	Xf subsp. fastidiosa	A
40	QUEIL	<i>Quercus ilex</i>	Xf subsp. fastidiosa	A
41	RHAAL	<i>Rhamnus alaternus</i>	Xf subsp. fastidiosa	A
42	RUBID	<i>Rubus idaeus</i>	Xf subsp. fastidiosa	A
43	RUBDI	<i>Rubus rigidus</i>	Xf subsp. fastidiosa	A
44	RUBUR	<i>Rubus ursinus</i>	Xf subsp. fastidiosa	A
45	RUACH	<i>Ruta chalepensis</i>	Xf subsp. fastidiosa	A
46	RMSOF	<i>Salvia rosmarinus</i>	Xf subsp. fastidiosa	A
47	SAMCN	<i>Sambucus canadensis</i>	Xf subsp. fastidiosa	A
48	SAMSS	<i>Sambucus</i> sp.	Xf subsp. fastidiosa	A
49	SPUJU	<i>Spartium junceum</i>	Xf subsp. fastidiosa	A
50	STZRE	<i>Strelitzia reginae</i>	Xf subsp. fastidiosa	A
51	SRQHY	<i>Streptocarpus</i> hybrids	Xf subsp. fastidiosa	A
52	TEUCP	<i>Teucrium capitatum</i>	Xf subsp. fastidiosa	A
53	ULEEU	<i>Ulex europaeus</i>	Xf subsp. fastidiosa	A
54	ULESS	<i>Ulex</i> sp.	Xf subsp. fastidiosa	A
55	ULMAM	<i>Ulmus americana</i>	Xf subsp. fastidiosa	A
56	VACCO	<i>Vaccinium corymbosum</i>	Xf subsp. fastidiosa	A
57	VINMA	<i>Vinca major</i>	Xf subsp. fastidiosa	A
58	VINSS	<i>Vinca</i> sp.	Xf subsp. fastidiosa	A

(Continues)

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
59	VITAE	Vitis aestivalis	Xf subsp. fastidiosa	A
60	CC227A	Vitis aestivalis hybrid	Xf subsp. fastidiosa	A
61	VITCL	Vitis californica	Xf subsp. fastidiosa	A
62	VITCA	Vitis candicans	Xf subsp. fastidiosa	A
63	CC238A	Vitis cinerea var. helleri × V. vulpina	Xf subsp. fastidiosa	A
64	VITGI	Vitis girdiana	Xf subsp. fastidiosa	A
65	VITHD	Vitis hybrids	Xf subsp. fastidiosa	A
66	VITRF	Vitis rotundifolia	Xf subsp. fastidiosa	A
67	VITSS	Vitis sp.	Xf subsp. fastidiosa	A
68	VITVI	Vitis vinifera	Xf subsp. fastidiosa	A
69	BRNPA	Broussonetia papyrifera	Xf subsp. fastidiosa	C
70	QUESS	Quercus sp.	Xf subsp. fastidiosa	C
71	ULMSS	Ulmus sp.	Xf subsp. fastidiosa	C
No.	Plant EPPO code	Plant species	Pest	Category
1	ACACL	Acacia cultriformis	Xf subsp. multiplex	A
2	ACADA	Acacia dealbata	Xf subsp. multiplex	A
3	ACALO	Acacia longifolia	Xf subsp. multiplex	A
4	ACAME	Acacia melanoxylon	Xf subsp. multiplex	A
5	ACASA	Acacia saligna	Xf subsp. multiplex	A
6	ACASS	Acacia sp.	Xf subsp. multiplex	A
7	ACRGR	Acer granatense	Xf subsp. multiplex	A
8	ACRGS	Acer griseum	Xf subsp. multiplex	A
9	ACRPP	Acer pseudoplatanus	Xf subsp. multiplex	A
10	ACRRB	Acer rubrum	Xf subsp. multiplex	A
11	ADCCL	Adenocarpus lainzii	Xf subsp. multiplex	A
12	ALURH	Alnus rhombifolia	Xf subsp. multiplex	A
13	AMBPS	Ambrosia psilostachya	Xf subsp. multiplex	A
14	AMBSS	Ambrosia sp.	Xf subsp. multiplex	A
15	AMBTR	Ambrosia trifida	Xf subsp. multiplex	A
16	AMBTT	Ambrosia trifida var. texana	Xf subsp. multiplex	A
17	AMCCO	Ampelopsis cordata	Xf subsp. multiplex	A
18	AYLBJ	Anthyllis barba-jovis	Xf subsp. multiplex	A
19	AYLHE	Anthyllis hermanniae	Xf subsp. multiplex	A
20	CC135A	Periwinkle (common name)	Xf subsp. multiplex	A
21	ARDUN	Arbutus unedo	Xf subsp. multiplex	A
22	CHYFR	Argyranthemum frutescens	Xf subsp. multiplex	A
23	ARTAB	Artemisia absinthium	Xf subsp. multiplex	A
24	ARTAO	Artemisia arborescens	Xf subsp. multiplex	A
25	ARTSS	Artemisia sp.	Xf subsp. multiplex	A
26	ASPAC	Asparagus acutifolius	Xf subsp. multiplex	A
27	ATUFF	Athyrium filix-femina	Xf subsp. multiplex	A
28	BACHA	Baccharis halimifolia	Xf subsp. multiplex	A
29	BEBTH	Berberis thunbergii	Xf subsp. multiplex	A
30	CCOSP	Calicotome spinosa	Xf subsp. multiplex	A
31	CCOVI	Calicotome villosa	Xf subsp. multiplex	A
32	CLXCI	Callistemon citrinus	Xf subsp. multiplex	A
33	CUNVU	Calluna vulgaris	Xf subsp. multiplex	A
34	KLCBR	Calocephalus brownii	Xf subsp. multiplex	A
35	CYAIL	Carya illinoensis	Xf subsp. multiplex	A
36	CYASS	Carya sp.	Xf subsp. multiplex	A

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
37	CSNSA	Castanea sativa	Xf subsp. multiplex	A
38	CETOC	Celtis occidentalis	Xf subsp. multiplex	A
39	CCSCA	Cercis canadensis	Xf subsp. multiplex	A
40	CCSOC	Cercis occidentalis	Xf subsp. multiplex	A
41	CCSSI	Cercis siliquastrum	Xf subsp. multiplex	A
42	CHEAL	Chenopodium album	Xf subsp. multiplex	A
43	CIOSS	Chionanthus sp.	Xf subsp. multiplex	A
44	CSTAL	Cistus albidus	Xf subsp. multiplex	A
45	CSTIC	Cistus creticus	Xf subsp. multiplex	A
46	CSTPS	Cistus inflatus	Xf subsp. multiplex	A
47	CSTMO	Cistus monspeliensis	Xf subsp. multiplex	A
48	CSTSA	Cistus salviifolius	Xf subsp. multiplex	A
49	CSTSS	Cistus sp.	Xf subsp. multiplex	A
50	CLVCI	Clematis cirrhosa	Xf subsp. multiplex	A
51	CLVVT	Clematis vitalba	Xf subsp. multiplex	A
52	STICA	Clinopodium nepeta	Xf subsp. multiplex	A
53	CONCN	Convolvulus cneorum	Xf subsp. multiplex	A
54	CPMRE	Coprosma repens	Xf subsp. multiplex	A
55	CRWSA	Cornus sanguinea	Xf subsp. multiplex	A
56	CZRVL	Coronilla valentina	Xf subsp. multiplex	A
57	CZRVG	Coronilla valentina subsp. glauca	Xf subsp. multiplex	A
58	SAOSC	Cytisus scoparius	Xf subsp. multiplex	A
59	CZSSS	Cytisus sp.	Xf subsp. multiplex	A
60	CC274A	Cytisus spinosa	Xf subsp. multiplex	A
61	CZSVI	Cytisus villosus	Xf subsp. multiplex	A
62	OSPEK	Dimorphotheca ecklonis	Xf subsp. multiplex	A
63	OSPFR	Dimorphotheca fruticosa	Xf subsp. multiplex	A
64	INUVI	Ditrichia viscosa	Xf subsp. multiplex	A
65	DODVI	Dodonaea viscosa	Xf subsp. multiplex	A
66	EHIPL	Echium plantagineum	Xf subsp. multiplex	A
67	ELGAN	Elaeagnus angustifolia	Xf subsp. multiplex	A
68	ELGEB	Elaeagnus × submacrophylla	Xf subsp. multiplex	A
69	ENCFA	Encelia farinosa	Xf subsp. multiplex	A
70	EIACN	Erica cinerea	Xf subsp. multiplex	A
71	ERICA	Erigeron canadensis	Xf subsp. multiplex	A
72	ERIKA	Erigeron karvinskianus	Xf subsp. multiplex	A
73	ERISS	Erigeron sp.	Xf subsp. multiplex	A
74	ERQUM	Eriocephalus africanus	Xf subsp. multiplex	A
75	EROMO	Erodium moschatum	Xf subsp. multiplex	A
76	EYOCH	Euryops chrysanthemoides	Xf subsp. multiplex	A
77	EYOPE	Euryops pectinatus	Xf subsp. multiplex	A
78	POLCU	Fallopia japonica	Xf subsp. multiplex	A
79	FIUCA	Ficus carica	Xf subsp. multiplex	A
80	RHAFR	Frangula alnus	Xf subsp. multiplex	A
81	FRXAM	Fraxinus americana	Xf subsp. multiplex	A
82	FRXAN	Fraxinus angustifolia	Xf subsp. multiplex	A
83	FRXEX	Fraxinus excelsior	Xf subsp. multiplex	A
84	FRXSS	Fraxinus sp.	Xf subsp. multiplex	A
85	GAZRI	Gazania rigens	Xf subsp. multiplex	A
86	GENCO	Genista corsica	Xf subsp. multiplex	A

(Continues)

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
87	GENEP	<i>Genista ephedroides</i>	Xf subsp. multiplex	A
88	GENSC	<i>Genista scorpius</i>	Xf subsp. multiplex	A
89	GENSS	<i>Genista</i> sp.	Xf subsp. multiplex	A
90	QEMTR	<i>Genista tridentata</i>	Xf subsp. multiplex	A
91	CC279A	<i>Genista valdes-bermejoi</i>	Xf subsp. multiplex	A
92	GENSA	<i>Genista</i> × <i>spachiana</i>	Xf subsp. multiplex	A
93	GIKBI	<i>Ginkgo biloba</i>	Xf subsp. multiplex	A
94	GLITR	<i>Gleditsia triacanthos</i>	Xf subsp. multiplex	A
95	GREJU	<i>Grevillea juniperina</i>	Xf subsp. multiplex	A
96	GRERS	<i>Grevillea rosmarinifolia</i>	Xf subsp. multiplex	A
97	HBEEL	<i>Hebe elliptica</i>	Xf subsp. multiplex	A
98	HBESS	<i>Hebe</i> sp.	Xf subsp. multiplex	A
99	HELAN	<i>Helianthus annuus</i>	Xf subsp. multiplex	A
100	HELSS	<i>Helianthus</i> sp.	Xf subsp. multiplex	A
101	HECIT	<i>Helichrysum italicum</i>	Xf subsp. multiplex	A
102	HECSS	<i>Helichrysum</i> sp.	Xf subsp. multiplex	A
103	HECST	<i>Helichrysum stoechas</i>	Xf subsp. multiplex	A
104	HIBSY	<i>Hibiscus syriacus</i>	Xf subsp. multiplex	A
105	HYPAN	<i>Hypericum androsaemum</i>	Xf subsp. multiplex	A
106	HYPPE	<i>Hypericum perforatum</i>	Xf subsp. multiplex	A
107	ILEAQ	<i>Ilex aquifolium</i>	Xf subsp. multiplex	A
108	IVAAN	<i>Iva annua</i>	Xf subsp. multiplex	A
109	SENBI	<i>Jacobaea maritima</i>	Xf subsp. multiplex	A
110	KOTBI	<i>Koelreuteria bipinnata</i>	Xf subsp. multiplex	A
111	LAEIN	<i>Lagerstroemia indica</i>	Xf subsp. multiplex	A
112	LAESS	<i>Lagerstroemia</i> sp.	Xf subsp. multiplex	A
113	LURNO	<i>Laurus nobilis</i>	Xf subsp. multiplex	A
114	LAVAN	<i>Lavandula angustifolia</i>	Xf subsp. multiplex	A
115	LAVDE	<i>Lavandula dentata</i>	Xf subsp. multiplex	A
116	LAVLA	<i>Lavandula latifolia</i>	Xf subsp. multiplex	A
117	LAVSS	<i>Lavandula</i> sp.	Xf subsp. multiplex	A
118	LAVST	<i>Lavandula stoechas</i>	Xf subsp. multiplex	A
119	LAVHE	<i>Lavandula</i> × <i>heterophylla</i>	Xf subsp. multiplex	A
120	LAVIN	<i>Lavandula</i> × <i>intermedia</i>	Xf subsp. multiplex	A
121	LVACR	<i>Lavatera cretica</i>	Xf subsp. multiplex	A
122	LIQST	<i>Liquidambar styraciflua</i>	Xf subsp. multiplex	A
123	LONIM	<i>Lonicera implexa</i>	Xf subsp. multiplex	A
124	LONJA	<i>Lonicera japonica</i>	Xf subsp. multiplex	A
125	LONPE	<i>Lonicera periclymenum</i>	Xf subsp. multiplex	A
126	LONSS	<i>Lonicera</i> sp.	Xf subsp. multiplex	A
127	LUPAD	<i>Lupinus aridorum</i>	Xf subsp. multiplex	A
128	LUPVI	<i>Lupinus villosus</i>	Xf subsp. multiplex	A
129	MAGGR	<i>Magnolia grandiflora</i>	Xf subsp. multiplex	A
130	MAGSO	<i>Magnolia</i> × <i>soulangeana</i>	Xf subsp. multiplex	A
131	MEDAR	<i>Medicago arborea</i>	Xf subsp. multiplex	A
132	MEDSA	<i>Medicago sativa</i>	Xf subsp. multiplex	A
133	MENSU	<i>Mentha suaveolens</i>	Xf subsp. multiplex	A
134	MTDEX	<i>Metrosideros excelsa</i>	Xf subsp. multiplex	A
135	MTDSS	<i>Metrosideros</i> sp.	Xf subsp. multiplex	A
136	MYMLA	<i>Myoporum laetum</i>	Xf subsp. multiplex	A
137	MYMSS	<i>Myoporum</i> sp.	Xf subsp. multiplex	A

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
138	MYVCO	<i>Myrtus communis</i>	Xf subsp. multiplex	A
139	NEROL	<i>Nerium oleander</i>	Xf subsp. multiplex	A
140	OLVEU	<i>Olea europaea</i>	Xf subsp. multiplex	A
141	OLVES	<i>Olea europaea</i> subsp. <i>sylvestris</i>	Xf subsp. multiplex	A
142	OLVSS	<i>Olea</i> sp.	Xf subsp. multiplex	A
143	PELGV	<i>Pelargonium graveolens</i>	Xf subsp. multiplex	A
144	PELSS	<i>Pelargonium</i> sp.	Xf subsp. multiplex	A
145	PEKAB	<i>Perovskia abrotanoides</i>	Xf subsp. multiplex	A
146	PGASA	<i>Phagnalon saxatile</i>	Xf subsp. multiplex	A
147	PLRAN	<i>Phillyrea angustifolia</i>	Xf subsp. multiplex	A
148	PLMFR	<i>Phlomis fruticosa</i>	Xf subsp. multiplex	A
149	PLMIT	<i>Phlomis italica</i>	Xf subsp. multiplex	A
150	PIAVE	<i>Pistacia vera</i>	Xf subsp. multiplex	A
151	PLALA	<i>Plantago lanceolata</i>	Xf subsp. multiplex	A
152	PLTOC	<i>Platanus occidentalis</i>	Xf subsp. multiplex	A
153	PLTSS	<i>Platanus</i> sp.	Xf subsp. multiplex	A
154	PLTHY	<i>Platanus</i> × <i>hispanica</i>	Xf subsp. multiplex	A
155	POGMY	<i>Polygala myrtifolia</i>	Xf subsp. multiplex	A
156	CC207A	<i>Polygala</i> × <i>grandiflora nana</i>	Xf subsp. multiplex	A
157	PRNAR	<i>Prunus armeniaca</i>	Xf subsp. multiplex	A
158	PRNAV	<i>Prunus avium</i>	Xf subsp. multiplex	A
159	PRNCF	<i>Prunus cerasifera</i>	Xf subsp. multiplex	A
160	PRNCE	<i>Prunus cerasus</i>	Xf subsp. multiplex	A
161	PRNDO	<i>Prunus domestica</i>	Xf subsp. multiplex	A
162	PRNDU	<i>Prunus dulcis</i>	Xf subsp. multiplex	A
163	PRNLR	<i>Prunus laurocerasus</i>	Xf subsp. multiplex	A
164	PRNME	<i>Prunus mexicana</i>	Xf subsp. multiplex	A
165	PRNPS	<i>Prunus persica</i>	Xf subsp. multiplex	A
166	PRNSC	<i>Prunus salicina</i>	Xf subsp. multiplex	A
167	PRNSS	<i>Prunus</i> sp.	Xf subsp. multiplex	A
168	PTEAQ	<i>Pteridium aquilinum</i>	Xf subsp. multiplex	A
169	QUECE	<i>Quercus cerris</i>	Xf subsp. multiplex	A
170	QUECO	<i>Quercus coccinea</i>	Xf subsp. multiplex	A
171	QUEFC	<i>Quercus falcata</i>	Xf subsp. multiplex	A
172	QUEIL	<i>Quercus ilex</i>	Xf subsp. multiplex	A
173	QUELA	<i>Quercus laevis</i>	Xf subsp. multiplex	A
174	QUEMC	<i>Quercus macrocarpa</i>	Xf subsp. multiplex	A
175	QUENI	<i>Quercus nigra</i>	Xf subsp. multiplex	A
176	QUEPA	<i>Quercus palustris</i>	Xf subsp. multiplex	A
177	QUEPH	<i>Quercus phellos</i>	Xf subsp. multiplex	A
178	QUEPU	<i>Quercus pubescens</i>	Xf subsp. multiplex	A
179	QUERO	<i>Quercus robur</i>	Xf subsp. multiplex	A
180	QUERU	<i>Quercus rubra</i>	Xf subsp. multiplex	A
181	QUESH	<i>Quercus shumardii</i>	Xf subsp. multiplex	A
182	QUESS	<i>Quercus</i> sp.	Xf subsp. multiplex	A
183	QUESU	<i>Quercus suber</i>	Xf subsp. multiplex	A
184	RATCO	<i>Ratibida columnifera</i>	Xf subsp. multiplex	A
185	LGOMO	<i>Retama monosperma</i>	Xf subsp. multiplex	A
186	RHAAL	<i>Rhamnus alaternus</i>	Xf subsp. multiplex	A
187	ROBPS	<i>Robinia pseudoacacia</i>	Xf subsp. multiplex	A
188	ROSCN	<i>Rosa canina</i>	Xf subsp. multiplex	A

(Continues)

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
189	ROSSS	Rosa sp.	Xf subsp. multiplex	A
190	RUBSS	Rubus sp.	Xf subsp. multiplex	A
191	RUBUL	Rubus ulmifolius	Xf subsp. multiplex	A
192	RUAGR	Ruta graveolens	Xf subsp. multiplex	A
193	SALMF	Salvia mellifera	Xf subsp. multiplex	A
194	SALOF	Salvia officinalis	Xf subsp. multiplex	A
195	RMSOF	Salvia rosmarinus	Xf subsp. multiplex	A
196	SALSS	Salvia sp.	Xf subsp. multiplex	A
197	SAMNI	Sambucus nigra	Xf subsp. multiplex	A
198	SAMSS	Sambucus sp.	Xf subsp. multiplex	A
199	SNTCH	Santolina chamaecyparissus	Xf subsp. multiplex	A
200	SNTMA	Santolina magonica	Xf subsp. multiplex	A
201	SNTSS	Santolina sp.	Xf subsp. multiplex	A
202	SAKSA	Sapindus saponaria	Xf subsp. multiplex	A
203	SXLAM	Scabiosa atropurpurea var. maritima	Xf subsp. multiplex	A
204	SENIQ	Senecio inaequidens	Xf subsp. multiplex	A
205	SOOVI	Solidago virgaurea	Xf subsp. multiplex	A
206	SPUJU	Spartium junceum	Xf subsp. multiplex	A
207	SPUSS	Spartium sp.	Xf subsp. multiplex	A
208	STZRE	Strelitzia reginae	Xf subsp. multiplex	A
209	SYRVU	Syringa vulgaris	Xf subsp. multiplex	A
210	ULEEU	Ulex europaeus	Xf subsp. multiplex	A
211	ULEMI	Ulex minor	Xf subsp. multiplex	A
212	ULEPA	Ulex parviflorus	Xf subsp. multiplex	A
213	ULESS	Ulex sp.	Xf subsp. multiplex	A
214	ULMAM	Ulmus americana	Xf subsp. multiplex	A
215	ULMCR	Ulmus crassifolia	Xf subsp. multiplex	A
216	ULMSS	Ulmus sp.	Xf subsp. multiplex	A
217	VACAH	Vaccinium ashei	Xf subsp. multiplex	A
218	VACCO	Vaccinium corymbosum	Xf subsp. multiplex	A
219	VACSS	Vaccinium sp.	Xf subsp. multiplex	A
220	VIBTI	Viburnum tinus	Xf subsp. multiplex	A
221	VINMA	Vinca major	Xf subsp. multiplex	A
222	VINMI	Vinca minor	Xf subsp. multiplex	A
223	VINSS	Vinca sp.	Xf subsp. multiplex	A
224	VIXAC	Vitex agnus-castus	Xf subsp. multiplex	A
225	VITAE	Vitis aestivalis	Xf subsp. multiplex	A
226	VITSS	Vitis sp.	Xf subsp. multiplex	A
227	VITVI	Vitis vinifera	Xf subsp. multiplex	A
228	WESRO	Westringia fruticosa	Xf subsp. multiplex	A
229	XANST	Xanthium strumarium	Xf subsp. multiplex	A
230	ACRPL	Acer platanoides	Xf subsp. multiplex	C
231	CCOSS	Calicotome sp.	Xf subsp. multiplex	C
232	CSTIS	Cistus × incanus	Xf subsp. multiplex	C
233	LIRTU	Liriodendron tulipifera	Xf subsp. multiplex	C
234	POGSS	Polygala sp.	Xf subsp. multiplex	C
235	CC206A	Polygala × dalmaisiana	Xf subsp. multiplex	C
236	RHASS	Rhamnus sp.	Xf subsp. multiplex	C
No.	Plant EPPO code	Plant species	Pest	Category
1	ACASA	Acacia saligna	Xf subsp. pauca	A

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
2	ACASS	Acacia sp.	Xf subsp. pauca	A
3	AMARE	Amaranthus retroflexus	Xf subsp. pauca	A
4	CC135A	Periwinkle (common name)	Xf subsp. pauca	A
5	ASPAC	Asparagus acutifolius	Xf subsp. pauca	A
6	CTURO	Catharanthus roseus	Xf subsp. pauca	A
7	CHEAL	Chenopodium album	Xf subsp. pauca	A
8	CSTAL	Cistus albidus	Xf subsp. pauca	A
9	CSTIC	Cistus creticus	Xf subsp. pauca	A
10	CIDSI	Citrus sinensis	Xf subsp. pauca	A
11	CIDSS	Citrus sp.	Xf subsp. pauca	A
12	COFAR	Coffea arabica	Xf subsp. pauca	A
13	COFSS	Coffea sp.	Xf subsp. pauca	A
14	OSPFRR	Dimorphotheca fruticosa	Xf subsp. pauca	A
15	DODVI	Dodonaea viscosa	Xf subsp. pauca	A
16	ELGAN	Elaeagnus angustifolia	Xf subsp. pauca	A
17	EMHMA	Eremophila maculata	Xf subsp. pauca	A
18	ERIBO	Erigeron bonariensis	Xf subsp. pauca	A
19	ERISS	Erigeron sp.	Xf subsp. pauca	A
20	ERISU	Erigeron sumatrensis	Xf subsp. pauca	A
21	EPHCH	Euphorbia chamaesyce	Xf subsp. pauca	A
22	EPHTE	Euphorbia terracina	Xf subsp. pauca	A
23	GENHS	Genista hirsuta	Xf subsp. pauca	A
24	GREJU	Grevillea juniperina	Xf subsp. pauca	A
25	HBESS	Hebe sp.	Xf subsp. pauca	A
26	HEOEU	Heliotropium europaeum	Xf subsp. pauca	A
27	HIBRS	Hibiscus rosa-sinensis	Xf subsp. pauca	A
28	HIBSS	Hibiscus sp.	Xf subsp. pauca	A
29	LURNO	Laurus nobilis	Xf subsp. pauca	A
30	LAVAN	Lavandula angustifolia	Xf subsp. pauca	A
31	LAVDE	Lavandula dentata	Xf subsp. pauca	A
32	LAVSS	Lavandula sp.	Xf subsp. pauca	A
33	LAVST	Lavandula stoechas	Xf subsp. pauca	A
34	MYMIN	Myoporum insulare	Xf subsp. pauca	A
35	MYVCO	Myrtus communis	Xf subsp. pauca	A
36	NEROL	Nerium oleander	Xf subsp. pauca	A
37	OLVEU	Olea europaea	Xf subsp. pauca	A
38	OLVES	Olea europaea subsp. sylvestris	Xf subsp. pauca	A
39	PELFR	Pelargonium fragrans	Xf subsp. pauca	A
40	PELSS	Pelargonium sp.	Xf subsp. pauca	A
41	PLRLA	Phillyrea latifolia	Xf subsp. pauca	A
42	PIAVE	Pistacia vera	Xf subsp. pauca	A
43	POGMY	Polygala myrtifolia	Xf subsp. pauca	A
44	PRNAV	Prunus avium	Xf subsp. pauca	A
45	PRNDO	Prunus domestica	Xf subsp. pauca	A
46	PRNDU	Prunus dulcis	Xf subsp. pauca	A
47	PRNSS	Prunus sp.	Xf subsp. pauca	A
48	RHAAL	Rhamnus alaternus	Xf subsp. pauca	A
49	RMSOF	Salvia rosmarinus	Xf subsp. pauca	A
50	SPUJU	Spartium junceum	Xf subsp. pauca	A
51	THYVU	Thymus vulgaris	Xf subsp. pauca	A
52	ULEPA	Ulex parviflorus	Xf subsp. pauca	A

(Continues)

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
53	VINMI	Vinca minor	Xf subsp. pauca	A
54	WESRO	Westringia fruticosa	Xf subsp. pauca	A
55	WESGL	Westringia glabra	Xf subsp. pauca	A
56	POGSS	Polygala sp.	Xf subsp. pauca	C
57	PRNPS	Prunus persica	Xf subsp. pauca	C
58	QUEIL	Quercus ilex	Xf subsp. pauca	C
59	SALOF	Salvia officinalis	Xf subsp. pauca	C
No.	Plant EPPO code	Plant species	Pest	Category
1	COFAR	Coffea arabica	Xf subsp. fastidiosa/ sandyi	A
2	COFCA	Coffea canephora	Xf subsp. fastidiosa/ sandyi	A
No.	Plant EPPO code	Plant species	Pest	Category
1	MORAL	Morus alba	Xf subsp. morus	A
2	MORRU	Morus rubra	Xf subsp. morus	A
3	MORSS	Morus sp.	Xf subsp. morus	A
4	NANDO	Nandina domestica	Xf subsp. morus	A
No.	Plant EPPO code	Plant species	Pest	Category
1	COFAR	Coffea arabica	Xf subsp. sandyi	A
2	COFSS	Coffea sp.	Xf subsp. sandyi	A
3	HEGSS	Hemerocallis sp.	Xf subsp. sandyi	A
4	IACMI	Jacaranda mimosifolia	Xf subsp. sandyi	A
5	MAGGR	Magnolia grandiflora	Xf subsp. sandyi	A
6	NANDO	Nandina domestica	Xf subsp. sandyi	A
7	NEROL	Nerium oleander	Xf subsp. sandyi	A
8	POGMY	Polygala myrtifolia	Xf subsp. sandyi	C
No.	Plant EPPO code	Plant species	Pest	Category
1	CXKTA	Chitalpa tashkentensis	Xf subsp. tashke	A
No.	Plant EPPO code	Plant species	Pest	Category
1	PYUPY	Pyrus pyrifolia	Xylella taiwanensis	A

APPENDIX B

Host plant species artificially infected

List of host plant species, artificially infected, of *X. fastidiosa* subsp. unknown (i.e. not reported in the publication), subsp. *fastidiosa*, subsp. *morus*, subsp. *multiplex*, subsp. *pauca*, subsp. *sandyi* and subsp. *tashke* according to categories A, B, C, D, E (as reported in Section 2.4.2):

- A.** Plant species positive with at least two detection methods (among: symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation) or positive with one method (either by sequencing or pure culture isolation).
- B.** The same as point A, but also including microscopy: plant species positive with at least two detection methods (among: microscopy, symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation) or positive with one method (either by sequencing or pure culture isolation).
- C.** Plant species positive with at least one detection method (among: symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation).
- D.** Plant species positive with at least one detection method including microscopy (microscopy, symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation).
- E.** All positives plant species reported, regardless of the detection methods (positive records but without the detection method specified, symptom observations, microscopy, symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing, pure culture isolation).

No.	Plant EPPO code	Plant species	Pest	Category
1	ACRMA	Acer macrophyllum	Xf subsp. unknown	A
2	ACRNE	Acer negundo	Xf subsp. unknown	A
3	AECCA	Aesculus californica	Xf subsp. unknown	A
4	ALURH	Alnus rhombifolia	Xf subsp. unknown	A
5	AMBEL	Ambrosia artemisiifolia	Xf subsp. unknown	A
6	AMBSS	Ambrosia sp.	Xf subsp. unknown	A
7	CC135A	Periwinkle (common name)	Xf subsp. unknown	A
8	ARBTH	Arabidopsis thaliana	Xf subsp. unknown	A
9	ARTDO	Artemisia douglasiana	Xf subsp. unknown	A
10	BACPI	Baccharis pilularis	Xf subsp. unknown	A
11	BACSF	Baccharis salicifolia	Xf subsp. unknown	A
12	BRSNI	Brassica nigra	Xf subsp. unknown	A
13	CYAIL	Carya illinoensis	Xf subsp. unknown	A
14	CTURO	Catharanthus roseus	Xf subsp. unknown	A
15	CIDAF	Citrus aurantiifolia	Xf subsp. unknown	A
16	CIDCL	Citrus clementina	Xf subsp. unknown	A
17	CC153A	Citrus clementina × C. sinensis	Xf subsp. unknown	A
18	CIDJA	Citrus jambhiri	Xf subsp. unknown	A
19	CIDRH	Citrus reshni	Xf subsp. unknown	A
20	CIDRE	Citrus reticulata	Xf subsp. unknown	A
21	CIDSI	Citrus sinensis	Xf subsp. unknown	A
22	CIDSS	Citrus sp.	Xf subsp. unknown	A
23	CIDRA	Citrus sunki	Xf subsp. unknown	A
24	CIDUN	Citrus unshiu	Xf subsp. unknown	A
25	CIDLO	Citrus × limonia	Xf subsp. unknown	A
26	CIDNO	Citrus × nobilis	Xf subsp. unknown	A
27	COFAR	Coffea arabica	Xf subsp. unknown	A
28	COFSS	Coffea sp.	Xf subsp. unknown	A
29	COIMA	Conium maculatum	Xf subsp. unknown	A
30	CPMRE	Coprosma repens	Xf subsp. unknown	A

(Continues)

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
31	CORSA	Coriandrum sativum	Xf subsp. unknown	A
32	CYPER	Cyperus eragrostis	Xf subsp. unknown	A
33	ECHCG	Echinochloa crus-galli	Xf subsp. unknown	A
34	FAGES	Fagopyrum esculentum	Xf subsp. unknown	A
35	FRXLA	Fraxinus latifolia	Xf subsp. unknown	A
36	CC181A	Hakea petiolaris	Xf subsp. unknown	A
37	HEEHE	Hedera helix	Xf subsp. unknown	A
38	LOUMA	Lobularia maritima	Xf subsp. unknown	A
39	MEDSA	Medicago sativa	Xf subsp. unknown	A
40	MORAL	Morus alba	Xf subsp. unknown	A
41	MORSS	Morus sp.	Xf subsp. unknown	A
42	NEROL	Nerium oleander	Xf subsp. unknown	A
43	NIOBE	Nicotiana benthamiana	Xf subsp. unknown	A
44	NIOTA	Nicotiana tabacum	Xf subsp. unknown	A
45	PRTQU	Parthenocissus quinquefolia	Xf subsp. unknown	A
46	PEBAM	Persea americana	Xf subsp. unknown	A
47	PLTOC	Platanus occidentalis	Xf subsp. unknown	A
48	POPFR	Populus fremontii	Xf subsp. unknown	A
49	PRNCF	Prunus cerasifera	Xf subsp. unknown	A
50	PRNDU	Prunus dulcis	Xf subsp. unknown	A
51	PRNPS	Prunus persica	Xf subsp. unknown	A
52	PRNSC	Prunus salicina	Xf subsp. unknown	A
53	PRNSS	Prunus sp.	Xf subsp. unknown	A
54	PYUPY	Pyrus pyrifolia	Xf subsp. unknown	A
55	QUEAG	Quercus agrifolia	Xf subsp. unknown	A
56	QUELO	Quercus lobata	Xf subsp. unknown	A
57	QUERU	Quercus rubra	Xf subsp. unknown	A
58	RHUDI	Rhus diversiloba	Xf subsp. unknown	A
59	ROSCA	Rosa californica	Xf subsp. unknown	A
60	RUBHP	Rubus hedycarpus subsp. procerus	Xf subsp. unknown	A
61	RUBDI	Rubus rigidus	Xf subsp. unknown	A
62	RUBUR	Rubus ursinus	Xf subsp. unknown	A
63	SAXLG	Salix laevigata	Xf subsp. unknown	A
64	SAXLL	Salix lasiolepis	Xf subsp. unknown	A
65	SALAP	Salvia apiana	Xf subsp. unknown	A
66	SALMF	Salvia mellifera	Xf subsp. unknown	A
67	SAMCN	Sambucus canadensis	Xf subsp. unknown	A
68	SAMSS	Sambucus sp.	Xf subsp. unknown	A
69	SPUJU	Spartium junceum	Xf subsp. unknown	A
70	SWAGA	Swainsona galegifolia	Xf subsp. unknown	A
71	SYPAL	Symphoricarpos albus	Xf subsp. unknown	A
72	TLNMO	Teline monspessulana	Xf subsp. unknown	A
73	ULMAM	Ulmus americana	Xf subsp. unknown	A
74	UMBCA	Umbellularia californica	Xf subsp. unknown	A
75	URTDI	Urtica dioica	Xf subsp. unknown	A
76	VACCO	Vaccinium corymbosum	Xf subsp. unknown	A
77	VACSS	Vaccinium sp.	Xf subsp. unknown	A
78	VICSA	Vicia sativa	Xf subsp. unknown	A
79	VINMA	Vinca major	Xf subsp. unknown	A

(Continued)

No.	Plant Eppo code	Plant species	Pest	Category
80	VINMI	<i>Vinca minor</i>	Xf subsp. unknown	A
81	CC229A	<i>Vitis arizonica</i> × <i>V. rupestris</i>	Xf subsp. unknown	A
82	CC233A	<i>Vitis arizonica/candicans</i> × <i>V. rupestris</i>	Xf subsp. unknown	A
83	VITCL	<i>Vitis californica</i>	Xf subsp. unknown	A
84	CC241A	<i>Vitis labrusca</i> × <i>V. vinifera</i>	Xf subsp. unknown	A
85	VITRF	<i>Vitis rotundifolia</i>	Xf subsp. unknown	A
86	CC244A	<i>Vitis rotundifolia</i> × <i>V. rupestris</i>	Xf subsp. unknown	A
87	VITRU	<i>Vitis rupestris</i>	Xf subsp. unknown	A
88	VITSS	<i>Vitis</i> sp.	Xf subsp. unknown	A
89	VITVI	<i>Vitis vinifera</i>	Xf subsp. unknown	A
90	MORRU	<i>Morus rubra</i>	Xf subsp. unknown	B
91	PRNDO	<i>Prunus domestica</i>	Xf subsp. unknown	B
92	CC232A	<i>Vitis arizonica/candicans</i>	Xf subsp. unknown	B
93	CC249A	<i>Vitis aestivalis</i> var. <i>smalliana</i>	Xf subsp. unknown	B
94	CC256A	<i>Vitis rufotomentosa</i>	Xf subsp. unknown	B
95	FRSAC	<i>Ambrosia acanthicarpa</i>	Xf subsp. unknown	C
96	AMBTT	<i>Ambrosia trifida</i> var. <i>texana</i>	Xf subsp. unknown	C
97	AMSDO	<i>Amsinckia douglasiana</i>	Xf subsp. unknown	C
98	BRORI	<i>Anisantha rigida</i>	Xf subsp. unknown	C
99	AVEFA	<i>Avena fatua</i>	Xf subsp. unknown	C
100	BRAPL	<i>Brachiaria plantaginea</i>	Xf subsp. unknown	C
101	BROSS	<i>Bromus</i> sp.	Xf subsp. unknown	C
102	CSPCH	<i>Callistephus chinensis</i>	Xf subsp. unknown	C
103	CNNSS	<i>Canna</i> sp.	Xf subsp. unknown	C
104	BROCA	<i>Ceratochloa cathartica</i>	Xf subsp. unknown	C
105	CC154A	<i>Citrus deliciosa</i> × <i>C. sinensis</i>	Xf subsp. unknown	C
106	CIDME	<i>Citrus medica</i>	Xf subsp. unknown	C
107	CIDTG	<i>Citrus tangerina</i>	Xf subsp. unknown	C
108	CIDRP	<i>Citrus</i> × <i>tangelo</i>	Xf subsp. unknown	C
109	GODGR	<i>Clarkia amoena</i> subsp. <i>lindleyi</i>	Xf subsp. unknown	C
110	CPMBA	<i>Coprosma baueri</i>	Xf subsp. unknown	C
111	CTTRT	<i>Cotoneaster rotundifolius</i>	Xf subsp. unknown	C
112	CYNDA	<i>Cynodon dactylon</i>	Xf subsp. unknown	C
113	CYPES	<i>Cyperus esculentus</i>	Xf subsp. unknown	C
114	SAOSC	<i>Cytisus scoparius</i>	Xf subsp. unknown	C
115	DAUCS	<i>Daucus carota</i> subsp. <i>sativus</i>	Xf subsp. unknown	C
116	DIGSA	<i>Digitaria sanguinalis</i>	Xf subsp. unknown	C
117	CHEAM	<i>Dysphania ambrosioides</i>	Xf subsp. unknown	C
118	EIPIC	<i>Epilobium brachycarpum</i>	Xf subsp. unknown	C
119	EPICT	<i>Epilobium ciliatum</i>	Xf subsp. unknown	C
120	ERADF	<i>Eragrostis diffusa</i>	Xf subsp. unknown	C
121	EROCI	<i>Erodium cicutarium</i>	Xf subsp. unknown	C
122	POLCO	<i>Fallopia convolvulus</i>	Xf subsp. unknown	C
123	GREAL	<i>Grevillea alpina</i>	Xf subsp. unknown	C
124	HELAN	<i>Helianthus annuus</i>	Xf subsp. unknown	C
125	HORMU	<i>Hordeum murinum</i>	Xf subsp. unknown	C
126	HORVX	<i>Hordeum vulgare</i>	Xf subsp. unknown	C
127	IVAAN	<i>Iva annua</i>	Xf subsp. unknown	C
128	LACSE	<i>Lactuca serriola</i>	Xf subsp. unknown	C
129	LTHCI	<i>Lathyrus cicera</i>	Xf subsp. unknown	C

(Continues)

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
130	LTHCL	Lathyrus clymenum	Xf subsp. unknown	C
131	LTHSA	Lathyrus sativus	Xf subsp. unknown	C
132	LEKLA	Leptospermum laevigatum	Xf subsp. unknown	C
133	LOLMU	Lolium multiflorum	Xf subsp. unknown	C
134	LOLTE	Lolium temulentum	Xf subsp. unknown	C
135	LONJA	Lonicera japonica	Xf subsp. unknown	C
136	MEUAL	Melilotus albus	Xf subsp. unknown	C
137	MEUAA	Melilotus albus var. annuus	Xf subsp. unknown	C
138	MEUIN	Melilotus indicus	Xf subsp. unknown	C
139	MEUOF	Melilotus officinalis	Xf subsp. unknown	C
140	MENSS	Mentha sp.	Xf subsp. unknown	C
141	OENSA	Oenanthe sarmentosa	Xf subsp. unknown	C
142	OEOEL	Oenothera elata	Xf subsp. unknown	C
143	OLVEU	Olea europaea	Xf subsp. unknown	C
144	PRTRR	Parthenocissus tricuspidata	Xf subsp. unknown	C
145	PASDI	Paspalum dilatatum	Xf subsp. unknown	C
146	PELZO	Pelargonium × hortorum	Xf subsp. unknown	C
147	PESCL	Pennisetum clandestinum	Xf subsp. unknown	C
148	PESGL	Pennisetum glaucum	Xf subsp. unknown	C
149	POLPE	Persicaria maculosa	Xf subsp. unknown	C
150	PHAMI	Phalaris minor	Xf subsp. unknown	C
151	PHAPA	Phalaris paradoxa	Xf subsp. unknown	C
152	PHLPR	Phleum pratense	Xf subsp. unknown	C
153	PHNAR	Photinia arbutifolia	Xf subsp. unknown	C
154	PTUCR	Pittosporum crassifolium	Xf subsp. unknown	C
155	PLTSS	Platanus sp.	Xf subsp. unknown	C
156	POAAN	Poa annua	Xf subsp. unknown	C
157	PMITR	Poncirus trifoliata	Xf subsp. unknown	C
158	RESOD	Reseda odorata	Xf subsp. unknown	C
159	RHERP	Rheum rhaponticum	Xf subsp. unknown	C
160	RUBVI	Rubus vitifolius	Xf subsp. unknown	C
161	RUMCR	Rumex crispus	Xf subsp. unknown	C
162	SAMGL	Sambucus cerulea	Xf subsp. unknown	C
163	SONAS	Sonchus asper	Xf subsp. unknown	C
164	SORHA	Sorghum halepense	Xf subsp. unknown	C
165	SORSU	Sorghum × drummondii	Xf subsp. unknown	C
166	SYRVU	Syringa vulgaris	Xf subsp. unknown	C
167	SYZPA	Syzygium paniculatum	Xf subsp. unknown	C
168	TRFFR	Trifolium fragiferum	Xf subsp. unknown	C
169	TRFHY	Trifolium hybridum	Xf subsp. unknown	C
170	TRFIN	Trifolium incarnatum	Xf subsp. unknown	C
171	TRFPR	Trifolium pratense	Xf subsp. unknown	C
172	TRFRE	Trifolium repens	Xf subsp. unknown	C
173	CC260A	Trifolium repens var. latum	Xf subsp. unknown	C
174	URTLY	Urtica dioica subsp. gracilis	Xf subsp. unknown	C
175	VICMO	Vicia monantha	Xf subsp. unknown	C
176	VITAC	Vitis acerifolia	Xf subsp. unknown	C
177	VITAE	Vitis aestivalis	Xf subsp. unknown	C
178	VITAZ	Vitis arizonica	Xf subsp. unknown	C

(Continued)

No.	Plant Eppo code	Plant species	Pest	Category
179	CC271A	Vitis arizonica hybrid	Xf subsp. unknown	C
180	CC234A	Vitis arizonica/girdiana	Xf subsp. unknown	C
181	CC235A	Vitis arizonica/girdiana × V. rupestris	Xf subsp. unknown	C
182	VITBE	Vitis berlandieri	Xf subsp. unknown	C
183	VITCA	Vitis candicans	Xf subsp. unknown	C
184	VITCI	Vitis cinerea	Xf subsp. unknown	C
185	CC239A	Vitis cinerea × V. berlandieri	Xf subsp. unknown	C
186	VITGI	Vitis girdiana	Xf subsp. unknown	C
187	VITLA	Vitis labrusca	Xf subsp. unknown	C
188	VITLI	Vitis lincecumii	Xf subsp. unknown	C
189	VITMO	Vitis monticola	Xf subsp. unknown	C
190	VITMU	Vitis munsoniana	Xf subsp. unknown	C
191	VITPA	Vitis palmata	Xf subsp. unknown	C
192	VITRI	Vitis riparia	Xf subsp. unknown	C
193	VITCN	Vitis simpsonii	Xf subsp. unknown	C
194	VITTI	Vitis tiliaefolia	Xf subsp. unknown	C
195	VITVU	Vitis vulpina	Xf subsp. unknown	C
196	VITCH	Vitis × champinii	Xf subsp. unknown	C
197	CC252A	Vitis aestivalis var. smalliana × V. simpsonii	Xf subsp. unknown	C
198	VITBL	Vitis bloodworthiana	Xf subsp. unknown	C
199	VITNE	Vitis nesbittiana	Xf subsp. unknown	C
200	CC257A	Vitis shuttleworthii	Xf subsp. unknown	C
201	VLPMY	Vulpia myuros	Xf subsp. unknown	C
202	XANOR	Xanthium orientale	Xf subsp. unknown	C
203	CC138A	(Prunus salicina × P. angustifolia) × (P. salicina × P. munsoniana)	Xf subsp. unknown	D
204	PRNAN	Prunus angustifolia	Xf subsp. unknown	D
205	PRNAV	Prunus avium	Xf subsp. unknown	D
206	CC210A	Prunus cerasifera × P. salicina	Xf subsp. unknown	D
207	CC213A	Prunus salicina × (P. salicina × P. cerasifera)	Xf subsp. unknown	D
208	CC231A	Vitis arizonica × V. vinifera	Xf subsp. unknown	D
209	CHEQU	Chenopodium quinoa	Xf subsp. unknown	E
210	CJCWE	Citroncirus webberi	Xf subsp. unknown	E
211	CIDMA	Citrus macrophylla	Xf subsp. unknown	E
212	NIOCL	Nicotiana clevelandii	Xf subsp. unknown	E
213	PRNAR	Prunus armeniaca	Xf subsp. unknown	E
214	PRNHO	Prunus hortulana	Xf subsp. unknown	E
215	PRNME	Prunus mexicana	Xf subsp. unknown	E
216	PRNMM	Prunus mume	Xf subsp. unknown	E
No.	Plant Eppo code	Plant Species	Pest	Category
1	AMABL	Amaranthus blitoides	Xf subsp. fastidiosa	A
2	FRSAC	Ambrosia acanthicarpa	Xf subsp. fastidiosa	A
3	AMBEL	Ambrosia artemisiifolia	Xf subsp. fastidiosa	A
4	CTURO	Catharanthus roseus	Xf subsp. fastidiosa	A
5	CHEQU	Chenopodium quinoa	Xf subsp. fastidiosa	A
6	COFAR	Coffea arabica	Xf subsp. fastidiosa	A
7	COIMA	Conium maculatum	Xf subsp. fastidiosa	A
8	CONAR	Convolvulus arvensis	Xf subsp. fastidiosa	A

(Continues)

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
9	CYPES	<i>Cyperus esculentus</i>	Xf subsp. fastidiosa	A
10	DATWR	<i>Datura wrightii</i>	Xf subsp. fastidiosa	A
11	ECHCG	<i>Echinochloa crus-galli</i>	Xf subsp. fastidiosa	A
12	ERICA	<i>Erigeron canadensis</i>	Xf subsp. fastidiosa	A
13	ERBGR	<i>Eriochloa gracilis</i>	Xf subsp. fastidiosa	A
14	EROMO	<i>Erodium moschatum</i>	Xf subsp. fastidiosa	A
15	EUCCM	<i>Eucalyptus camaldulensis</i>	Xf subsp. fastidiosa	A
16	EUCGL	<i>Eucalyptus globulus</i>	Xf subsp. fastidiosa	A
17	HELAN	<i>Helianthus annuus</i>	Xf subsp. fastidiosa	A
18	PHBPU	<i>Ipomoea purpurea</i>	Xf subsp. fastidiosa	A
19	LACSE	<i>Lactuca serriola</i>	Xf subsp. fastidiosa	A
20	MALPA	<i>Malva parviflora</i>	Xf subsp. fastidiosa	A
21	MEDSA	<i>Medicago sativa</i>	Xf subsp. fastidiosa	A
22	NIOGL	<i>Nicotiana glauca</i>	Xf subsp. fastidiosa	A
23	NIOTA	<i>Nicotiana tabacum</i>	Xf subsp. fastidiosa	A
24	POPTR	<i>Populus tremula</i>	Xf subsp. fastidiosa	A
25	POROL	<i>Portulaca oleracea</i>	Xf subsp. fastidiosa	A
26	PRNDU	<i>Prunus dulcis</i>	Xf subsp. fastidiosa	A
27	PRNSS	<i>Prunus</i> sp.	Xf subsp. fastidiosa	A
28	RUBUR	<i>Rubus ursinus</i>	Xf subsp. fastidiosa	A
29	RUMCR	<i>Rumex crispus</i>	Xf subsp. fastidiosa	A
30	SAXAL	<i>Salix alba</i>	Xf subsp. fastidiosa	A
31	SMMCH	<i>Simmondsia chinensis</i>	Xf subsp. fastidiosa	A
32	LYPES	<i>Solanum lycopersicum</i>	Xf subsp. fastidiosa	A
33	SOLME	<i>Solanum melongena</i>	Xf subsp. fastidiosa	A
34	SONOL	<i>Sonchus oleraceus</i>	Xf subsp. fastidiosa	A
35	SORHA	<i>Sorghum halepense</i>	Xf subsp. fastidiosa	A
36	VACCO	<i>Vaccinium corymbosum</i>	Xf subsp. fastidiosa	A
37	VACSS	<i>Vaccinium</i> sp.	Xf subsp. fastidiosa	A
38	VICFX	<i>Vicia faba</i>	Xf subsp. fastidiosa	A
39	VICSA	<i>Vicia sativa</i>	Xf subsp. fastidiosa	A
40	VITSS	<i>Vitis</i> sp.	Xf subsp. fastidiosa	A
41	VITVI	<i>Vitis vinifera</i>	Xf subsp. fastidiosa	A
42	CC247A	<i>Vitis vinifera</i> hybrid	Xf subsp. fastidiosa	A
43	XANST	<i>Xanthium strumarium</i>	Xf subsp. fastidiosa	A
44	ARBTH	<i>Arabidopsis thaliana</i>	Xf subsp. fastidiosa	B
45	CHYHO	<i>Dendranthema × grandiflorum</i>	Xf subsp. fastidiosa	C
46	LURNO	<i>Laurus nobilis</i>	Xf subsp. fastidiosa	C
47	MYVCO	<i>Myrtus communis</i>	Xf subsp. fastidiosa	C
48	NIOBE	<i>Nicotiana benthamiana</i>	Xf subsp. fastidiosa	C
49	OLVEU	<i>Olea europaea</i>	Xf subsp. fastidiosa	C
50	POGMY	<i>Polygala myrtifolia</i>	Xf subsp. fastidiosa	C
51	POPCN	<i>Populus × canescens</i>	Xf subsp. fastidiosa	C
52	PRNAR	<i>Prunus armeniaca</i>	Xf subsp. fastidiosa	C
53	PRNDO	<i>Prunus domestica</i>	Xf subsp. fastidiosa	C
54	CC211A	<i>Prunus dulcis × P. webbii</i>	Xf subsp. fastidiosa	C
55	PRNPS	<i>Prunus persica</i>	Xf subsp. fastidiosa	C
56	CC212A	<i>Prunus persica × P. webbii</i>	Xf subsp. fastidiosa	C
57	PRNWE	<i>Prunus webbii</i>	Xf subsp. fastidiosa	C

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
58	PYUCO	<i>Pyrus communis</i>	Xf subsp. fastidiosa	C
59	QUEPE	<i>Quercus petraea</i>	Xf subsp. fastidiosa	C
60	RUBDI	<i>Rubus rigidus</i>	Xf subsp. fastidiosa	C
61	SAXCP	<i>Salix caprea</i>	Xf subsp. fastidiosa	C
62	SAMCN	<i>Sambucus canadensis</i>	Xf subsp. fastidiosa	C
63	VINMA	<i>Vinca major</i>	Xf subsp. fastidiosa	C
64	VITAC	<i>Vitis acerifolia</i>	Xf subsp. fastidiosa	C
65	VITAE	<i>Vitis aestivalis</i>	Xf subsp. fastidiosa	C
66	VITAZ	<i>Vitis arizonica</i>	Xf subsp. fastidiosa	C
67	CC232A	<i>Vitis arizonica/candicans</i>	Xf subsp. fastidiosa	C
68	VITBE	<i>Vitis berlandieri</i>	Xf subsp. fastidiosa	C
69	VITCL	<i>Vitis californica</i>	Xf subsp. fastidiosa	C
70	VITCA	<i>Vitis candicans</i>	Xf subsp. fastidiosa	C
71	CC237A	<i>Vitis champinii</i> × (<i>V. solonis</i> × <i>V. othello</i>)	Xf subsp. fastidiosa	C
72	VITCI	<i>Vitis cinerea</i>	Xf subsp. fastidiosa	C
73	VITGI	<i>Vitis girdiana</i>	Xf subsp. fastidiosa	C
74	VITLA	<i>Vitis labrusca</i>	Xf subsp. fastidiosa	C
75	VITMO	<i>Vitis monticola</i>	Xf subsp. fastidiosa	C
76	VITRI	<i>Vitis riparia</i>	Xf subsp. fastidiosa	C
77	VITRF	<i>Vitis rotundifolia</i>	Xf subsp. fastidiosa	C
78	VITRU	<i>Vitis rupestris</i>	Xf subsp. fastidiosa	C
79	VITTI	<i>Vitis tiliaefolia</i>	Xf subsp. fastidiosa	C
80	VITTL	<i>Vitis trelisei</i>	Xf subsp. fastidiosa	C
81	VITVU	<i>Vitis vulpina</i>	Xf subsp. fastidiosa	C
82	CC277A	<i>Vitis</i> × <i>doaniana</i>	Xf subsp. fastidiosa	C
83	VITNE	<i>Vitis nesbittiana</i>	Xf subsp. fastidiosa	C
84	CC257A	<i>Vitis shuttleworthii</i>	Xf subsp. fastidiosa	C
85	LIQST	<i>Liquidambar styraciflua</i>	Xf subsp. fastidiosa	E
No.	Plant EPPO code	Plant Species	Pest	Category
1	ACRRB	<i>Acer rubrum</i>	Xf subsp. multiplex	A
2	AMBEL	<i>Ambrosia artemisiifolia</i>	Xf subsp. multiplex	A
3	CYAIL	<i>Carya illinoensis</i>	Xf subsp. multiplex	A
4	COFAR	<i>Coffea arabica</i>	Xf subsp. multiplex	A
5	HELAN	<i>Helianthus annuus</i>	Xf subsp. multiplex	A
6	LIQST	<i>Liquidambar styraciflua</i>	Xf subsp. multiplex	A
7	MEDSA	<i>Medicago sativa</i>	Xf subsp. multiplex	A
8	NIOTA	<i>Nicotiana tabacum</i>	Xf subsp. multiplex	A
9	OLVEU	<i>Olea europaea</i>	Xf subsp. multiplex	A
10	PIAVE	<i>Pistacia vera</i>	Xf subsp. multiplex	A
11	PLTOC	<i>Platanus occidentalis</i>	Xf subsp. multiplex	A
12	POGMY	<i>Polygala myrtifolia</i>	Xf subsp. multiplex	A
13	PRNCF	<i>Prunus cerasifera</i>	Xf subsp. multiplex	A
14	PRNDU	<i>Prunus dulcis</i>	Xf subsp. multiplex	A
15	PRNPS	<i>Prunus persica</i>	Xf subsp. multiplex	A
16	PRNSS	<i>Prunus</i> sp.	Xf subsp. multiplex	A
17	QUEFC	<i>Quercus falcata</i>	Xf subsp. multiplex	A
18	RUBFR	<i>Rubus fruticosus</i>	Xf subsp. multiplex	A
19	RUBUR	<i>Rubus ursinus</i>	Xf subsp. multiplex	A
20	VACCO	<i>Vaccinium corymbosum</i>	Xf subsp. multiplex	A
21	VITVI	<i>Vitis vinifera</i>	Xf subsp. multiplex	A

(Continues)

(Continued)

No.	Plant EPPO code	Plant species	Pest	Category
22	BIDPI	<i>Bidens pilosa</i>	Xf subsp. multiplex	C
23	CTURO	<i>Catharanthus roseus</i>	Xf subsp. multiplex	C
24	LEPRU	<i>Lepidium ruderales</i>	Xf subsp. multiplex	C
25	MABSD	<i>Malus domestica</i>	Xf subsp. multiplex	C
26	NEROL	<i>Nerium oleander</i>	Xf subsp. multiplex	C
27	PRNAR	<i>Prunus armeniaca</i>	Xf subsp. multiplex	C
28	PRNAV	<i>Prunus avium</i>	Xf subsp. multiplex	C
29	PRNDO	<i>Prunus domestica</i>	Xf subsp. multiplex	C
30	CC212A	<i>Prunus persica</i> × <i>P. webbii</i>	Xf subsp. multiplex	C
31	PRNSC	<i>Prunus salicina</i>	Xf subsp. multiplex	C
32	PRNWE	<i>Prunus webbii</i>	Xf subsp. multiplex	C
33	PYUCO	<i>Pyrus communis</i>	Xf subsp. multiplex	C
34	QUEPE	<i>Quercus petraea</i>	Xf subsp. multiplex	C
35	RAPSR	<i>Raphanus sativus</i>	Xf subsp. multiplex	C
36	SAXAL	<i>Salix alba</i>	Xf subsp. multiplex	C
37	SOLAM	<i>Solanum americanum</i>	Xf subsp. multiplex	C
38	VACSS	<i>Vaccinium</i> sp.	Xf subsp. multiplex	E
No.	Plant EPPO code	Plant Species	Pest	Category
1	BIDPI	<i>Bidens pilosa</i>	Xf subsp. pauca	A
2	BRADC	<i>Brachiaria decumbens</i>	Xf subsp. pauca	A
3	BRAPL	<i>Brachiaria plantaginea</i>	Xf subsp. pauca	A
4	CTURO	<i>Catharanthus roseus</i>	Xf subsp. pauca	A
5	CIDRE	<i>Citrus reticulata</i>	Xf subsp. pauca	A
6	CIDSI	<i>Citrus sinensis</i>	Xf subsp. pauca	A
7	CIDSS	<i>Citrus</i> sp.	Xf subsp. pauca	A
8	CIDNO	<i>Citrus</i> × <i>nobilis</i>	Xf subsp. pauca	A
9	COFAR	<i>Coffea arabica</i>	Xf subsp. pauca	A
10	COFSS	<i>Coffea</i> sp.	Xf subsp. pauca	A
11	ECHCG	<i>Echinochloa crus-galli</i>	Xf subsp. pauca	A
12	IASAZ	<i>Jasminum azoricum</i>	Xf subsp. pauca	A
13	MEDSA	<i>Medicago sativa</i>	Xf subsp. pauca	A
14	NEROL	<i>Nerium oleander</i>	Xf subsp. pauca	A
15	NIOCL	<i>Nicotiana clevelandii</i>	Xf subsp. pauca	A
16	NIOTA	<i>Nicotiana tabacum</i>	Xf subsp. pauca	A
17	OCIBA	<i>Ocimum basilicum</i>	Xf subsp. pauca	A
18	OLVEU	<i>Olea europaea</i>	Xf subsp. pauca	A
19	POGMY	<i>Polygala myrtifolia</i>	Xf subsp. pauca	A
20	SOLAM	<i>Solanum americanum</i>	Xf subsp. pauca	A
21	ARBTH	<i>Arabidopsis thaliana</i>	Xf subsp. pauca	B
22	CC135A	Periwinkle (common name)	Xf subsp. pauca	C
23	CHEAL	<i>Chenopodium album</i>	Xf subsp. pauca	C
24	DIGHO	<i>Digitaria horizontalis</i>	Xf subsp. pauca	C
25	LEPRU	<i>Lepidium ruderales</i>	Xf subsp. pauca	C
26	MABSD	<i>Malus domestica</i>	Xf subsp. pauca	C
27	PRNAV	<i>Prunus avium</i>	Xf subsp. pauca	C
28	PRNDO	<i>Prunus domestica</i>	Xf subsp. pauca	C
29	PRNDU	<i>Prunus dulcis</i>	Xf subsp. pauca	C
30	PYUCO	<i>Pyrus communis</i>	Xf subsp. pauca	C
31	QUEPE	<i>Quercus petraea</i>	Xf subsp. pauca	C
32	RAPSR	<i>Raphanus sativus</i>	Xf subsp. pauca	C

(Continued)

No.	Plant Eppo code	Plant species	Pest	Category
33	SAXAL	Salix alba	Xf subsp. pauca	C
34	RMSOF	Salvia rosmarinus	Xf subsp. pauca	C
35	VITVI	Vitis vinifera	Xf subsp. pauca	C
No.	Plant Eppo code	Plant Species	Pest	Category
1	MORAL	Morus alba	Xf subsp. morus	A
2	NEROL	Nerium oleander	Xf subsp. morus	A
No.	Plant Eppo code	Plant Species	Pest	Category
1	CTURO	Catharanthus roseus	Xf subsp. sandyi	A
2	MEDSA	Medicago sativa	Xf subsp. sandyi	A
3	NEROL	Nerium oleander	Xf subsp. sandyi	A
4	PRNDU	Prunus dulcis	Xf subsp. sandyi	A
5	VINMA	Vinca major	Xf subsp. sandyi	A
6	COFAR	Coffea arabica	Xf subsp. sandyi	C
7	MABSD	Malus domestica	Xf subsp. sandyi	C
8	NIOTA	Nicotiana tabacum	Xf subsp. sandyi	C
9	OLVEU	Olea europaea	Xf subsp. sandyi	C
10	PYUCO	Pyrus communis	Xf subsp. sandyi	C
11	VITVI	Vitis vinifera	Xf subsp. sandyi	C
No.	Plant Eppo code	Plant Species	Pest	Category
1	NIOBE	Nicotiana benthamiana	Xf subsp. tashke	C

APPENDIX C

Host plant species infected in unspecified conditions

List of host plant species, infected in conditions not specified (i.e. the kind of infection (natural or artificial) was not specified in the reference), of *X. fastidiosa* subsp. unknown (i.e. not reported in the publication), subsp. *fastidiosa*, subsp. *multi-plex*, subsp. *pauca* and subsp. *sandyi* according to categories A, B, C, D, E (as reported in section 2.4.2):

A. Plant species positive with at least two detection methods (among: symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation) or positive with one method (either by sequencing or pure culture isolation).

B. The same as point A, but also including microscopy: plant species positive with at least two detection methods (among: microscopy, symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation) or positive with one method (either by sequencing or pure culture isolation).

C. Plant species positive with at least one detection method (among: symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation).

D. Plant species positive with at least one detection method including microscopy (microscopy, symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and pure culture isolation).

E. All positives plant species reported, regardless of the detection methods (positive records but without the detection method specified, symptom observations, microscopy, symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing, pure culture isolation).

No.	Plant EPPO code	Plant species	Pest	Category
1	AMCAR	Ampelopsis arborea	Xf subsp. unknown	A
2	CTURO	Catharanthus roseus	Xf subsp. unknown	A
3	CTUSS	Catharanthus sp.	Xf subsp. unknown	A
4	CIDJA	Citrus jambhiri	Xf subsp. unknown	A
5	CIDSI	Citrus sinensis	Xf subsp. unknown	A
6	COFAR	Coffea arabica	Xf subsp. unknown	A
7	HIBSH	Hibiscus schizopetalus	Xf subsp. unknown	A
8	MORNI	Morus nigra	Xf subsp. unknown	A
9	NEROL	Nerium oleander	Xf subsp. unknown	A
10	PRNPS	Prunus persica	Xf subsp. unknown	A
11	PRNSS	Prunus sp.	Xf subsp. unknown	A
12	SAMCN	Sambucus canadensis	Xf subsp. unknown	A
13	VITMU	Vitis munsoniana	Xf subsp. unknown	A
14	VITRF	Vitis rotundifolia	Xf subsp. unknown	A
15	VITSS	Vitis sp.	Xf subsp. unknown	A
16	VITVI	Vitis vinifera	Xf subsp. unknown	A
17	AMBSS	Ambrosia sp.	Xf subsp. unknown	B
18	CC135A	Periwinkle (common name)	Xf subsp. unknown	B
19	ACRSS	Acer sp.	Xf subsp. unknown	C
20	CYAIL	Carya illinoensis	Xf subsp. unknown	C
21	CIDSS	Citrus sp.	Xf subsp. unknown	C
22	PRNDU	Prunus dulcis	Xf subsp. unknown	C
23	PRNSC	Prunus salicina	Xf subsp. unknown	C
24	PYUSS	Pyrus sp.	Xf subsp. unknown	C
25	TLNMO	Teline monspessulana	Xf subsp. unknown	C
26	VACDA	Vaccinium darrowii	Xf subsp. unknown	C
27	VACSS	Vaccinium sp.	Xf subsp. unknown	C
28	PRNAN	Prunus angustifolia	Xf subsp. unknown	D
29	VITLA	Vitis labrusca	Xf subsp. unknown	D
30	MORSS	Morus sp.	Xf subsp. unknown	E

No.	Plant EPPO code	Plant species	Pest	Category
31	NIOTA	Nicotiana tabacum	Xf subsp. unknown	E
No.	Plant EPPO code	Plant species	Pest	Category
1	AMBEL	Ambrosia artemisiifolia	Xf subsp. fastidiosa	A
2	LUPSS	Lupinus sp.	Xf subsp. fastidiosa	A
3	PRNDU	Prunus dulcis	Xf subsp. fastidiosa	A
4	SAMSS	Sambucus sp.	Xf subsp. fastidiosa	A
5	VITRF	Vitis rotundifolia	Xf subsp. fastidiosa	A
6	VITSS	Vitis sp.	Xf subsp. fastidiosa	A
7	VITVI	Vitis vinifera	Xf subsp. fastidiosa	A
No.	Plant EPPO code	Plant species	Pest	Category
1	AMBTR	Ambrosia trifida	Xf subsp. multiplex	A
2	MORSS	Morus sp.	Xf subsp. multiplex	A
3	PLTSS	Platanus sp.	Xf subsp. multiplex	A
4	PRNCF	Prunus cerasifera	Xf subsp. multiplex	A
5	PRNDO	Prunus domestica	Xf subsp. multiplex	A
6	PRNDU	Prunus dulcis	Xf subsp. multiplex	A
7	PRNSC	Prunus salicina	Xf subsp. multiplex	A
8	QUESS	Quercus sp.	Xf subsp. multiplex	A
9	RUBFR	Rubus fruticosus	Xf subsp. multiplex	A
10	RUBSS	Rubus sp.	Xf subsp. multiplex	A
11	VACCO	Vaccinium corymbosum	Xf subsp. multiplex	A
12	CC225A	Vaccinium corymbosum × V. angustifolium hybrid	Xf subsp. multiplex	A
13	VINSS	Vinca sp.	Xf subsp. multiplex	A
14	LIQST	Liquidambar styraciflua	Xf subsp. multiplex	C
15	QUELA	Quercus laevis	Xf subsp. multiplex	C
16	QUERU	Quercus rubra	Xf subsp. multiplex	C
No.	Plant EPPO code	Plant species	Pest	Category
1	CIDSI	Citrus sinensis	Xf subsp. pauca	A
2	CIDSS	Citrus sp.	Xf subsp. pauca	A
3	COFSS	Coffea sp.	Xf subsp. pauca	A
4	HIBFR	Hibiscus fragilis	Xf subsp. pauca	A
5	HIBSS	Hibiscus sp.	Xf subsp. pauca	A
6	NEROL	Nerium oleander	Xf subsp. pauca	A
7	PRNDO	Prunus domestica	Xf subsp. pauca	A
8	PRNSS	Prunus sp.	Xf subsp. pauca	A
No.	Plant EPPO code	Plant species	Pest	Category
1	COFAR	Coffea arabica	Xf subsp. sandyi	A
2	NEROL	Nerium oleander	Xf subsp. sandyi	C

APPENDIX D

Xylella fastidiosa Multilocus sequence types

Number of records for each plant species natural, artificial and infected in not specified conditions by different multilocus sequence types (STs). The records for natural infection are divided per country. In general, the subspecies and the STs are reported as in the publication. If the subspecies and/or the STs are inferred from another publication or obtained from personal communication of the author of the publication, a note is added in the genotyping comment column of the excel file available in Zenodo in the EFSA Knowledge Junction community (<https://doi.org/10.5281/zenodo.1339343>). Abbreviations: AR (Argentina), BR (Brazil), CR (Costa Rica), EC (Ecuador), FR (France), HN (Honduras), IL (Israel), IT (Italy), MX (Mexico), PT (Portugal), ES (Spain), US (United States of America).

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total			
<i>fastidiosa</i>			22				2	1	21	9	82	155		292	313	9	614
ST1							2	1	18	4	82	107		214	307	2	523
Acacia dealbata													1		1		1
Acer sp.														1			1
Amaranthus blitoides															1		1
Ambrosia acanthicarpa															2		2
Calicotome spinosa											4			4			4
Catharanthus roseus															2		2
Cercis occidentalis												1		1			1
Chenopodium quinoa															2		2
Cistus monspeliensis												2		2			2
Cistus sp.									1					1			1
Citrus sinensis												1		1			1
Conium maculatum															2		2
Convolvulus arvensis															1		1
Cyperus esculentus															1		1
Cytisus striatus									1					1			1
Datura wrightii															1		1
Echinochloa crus-galli															1		1
Erigeron canadensis															1		1
Eriochloa gracilis															1		1
Erodium moschatum															2		2
Eucalyptus camaldulensis															2		2
Eucalyptus globulus															1		1
Ficus carica											1			1			1

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total	
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
Genista lucida											3				3		3	
Helianthus annuus																3		3
Ipomoea purpurea																2		2
Juglans regia											4				4			4
Lactuca serriola																3		3
Malva parviflora																2		2
Medicago sativa												3			3	11		14
Metrosideros sp.												1			1			1
Nicotiana benthamiana																1		1
Nicotiana glauca																2		2
Nicotiana tabacum																1		1
Olea europaea																1		1
Pluchea odorata												1			1			1
Polygala myrtifolia											3				3	1		4
Portulaca oleracea																1		1
Prunus avium											11	2			13			13
Prunus domestica																1		1
Prunus dulcis							2	1			19	23			45	42	1	88
Quercus ilex												1			1			1
Rhamnus alaternus												8			8			8
Rubus ursinus																2		2
Rumex crispus																1		1
Ruta chalepensis											3				3			3
Salix alba																1		1
Sambucus canadensis												2			2			2
Sambucus sp.												1			1			1
Simmondsia chinensis																2		2
Solanum lycopersicum																1		1
Solanum melongena																1		1
Sonchus oleraceus																1		1
Sorghum halepense																1		1
Spartium junceum												1			1			1

(Continues)

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total	
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
Teucrium capitatum											3				3		3	
Vaccinium corymbosum													2		2	2	4	
Vaccinium sp.																5	5	
Vicia faba																1	1	
Vicia sativa																1	1	
Vitis aestivalis												2			2		2	
Vitis girdiana													1		1		1	
Vitis sp.											2			31	33	1	34	
Vitis vinifera											16	21	34		71	185	256	
Vitis vinifera hybrid																9	9	
Xanthium strumarium																3	3	
ST17																1	1	
Coffea arabica																1	1	
ST18																1	1	
Vitis sp.																1	1	
ST19																1	1	
Coffea arabica																1	1	
ST2													5	42	47	5	7	59
Ambrosia artemisiifolia																2	1	3
Citrus limon															1		1	
Citrus paradisi															1		1	
Coffea sp.															1		1	
Elaeagnus angustifolia															1		1	
Myrtus communis															1		1	
Polygala myrtifolia																1	1	
Prunus domestica																1	1	
Quercus petraea																1	1	
Salix alba																1	1	
Ulex europaeus															1		1	
Vitis hybrids																2	2	
Vitis rotundifolia																6	1	7
Vitis sp.																5	5	

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total			
Vitis vinifera												26		26	1	5	32
ST20			1											1			1
Coffea arabica			1											1			1
ST21			1											1			1
Coffea arabica			1											1			1
ST3												1		1			1
Lupinus aridorum												1		1			1
ST33			1											1			1
Coffea arabica			1											1			1
ST4												5		5	1		6
Medicago sativa															1		1
Vitis sp.												4		4			4
Vitis vinifera												1		1			1
ST47			2											2			2
Coffea arabica			1											1			1
Vitis sp.			1											1			1
ST52			1											1			1
Coffea arabica			1											1			1
ST54			1											1			1
Coffea arabica			1											1			1
ST55			1											1			1
Coffea arabica			1											1			1
ST56			1											1			1
Coffea arabica			1											1			1
ST57			1											1			1
Coffea arabica			1											1			1
ST59			1											1			1
Vitis vinifera			1											1			1
ST60			1											1			1
Vitis vinifera			1											1			1
ST61			3											3			3
Citrus sinensis			1											1			1

(Continues)

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total			
Coffea arabica			2												2		2
ST72			1												1		1
Coffea arabica			1												1		1
ST75									3						3		3
Coffea canephora									3						3		3
ST76			2												2		2
Coffea arabica			2												2		2
ST77			1												1		1
Coffea arabica			1												1		1
<i>fastidiosa/sandyi</i>			3									1			4		4
ST72			2												2		2
Coffea arabica			2												2		2
ST75												1			1		1
Coffea canephora												1			1		1
ST76			1												1		1
Coffea arabica			1												1		1
<i>morus</i>														25	25		25
ST29														10	10		10
Morus alba														4	4		4
Morus rubra														4	4		4
Morus sp.														2	2		2
ST30														5	5		5
Morus alba														4	4		4
Nandina domestica														1	1		1
ST31														6	6		6
Morus sp.														6	6		6
ST62														4	4		4
Morus alba														4	4		4
<i>multiplex</i>		6			163			126		103	267	246		911	126	16	1053
ST10												11		11	4		15
Polygala myrtifolia															1		1
Prunus domestica												3		3	1		4

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total			
Prunus persica												3		3			3
Prunus sp.												5		5			5
Quercus petraea															1		1
Salix alba															1		1
ST15												3		3			3
Prunus cerasifera												3		3			3
ST22												3		3		1	4
Ambrosia psilostachya												1		1			1
Ambrosia trifida												2		2		1	3
ST23												12		12			12
Acer rubrum												1		1			1
Ambrosia trifida												2		2			2
Helianthus sp.												3		3			3
Iva annua												2		2			2
Quercus rubra												1		1			1
Ratibida columnifera												2		2			2
Solidago virgaurea												1		1			1
ST24												5		5	3		8
Cercis occidentalis												1		1			1
Liquidambar styraciflua												3		3	2		5
Prunus dulcis															1		1
Ulmus crassifolia												1		1			1
ST25												4		4			4
Encelia farinosa												4		4			4
ST26		3										12		15	8		23
Alnus rhombifolia												1		1			1
Bidens pilosa															1		1
Lepidium ruderale															1		1
Prunus cerasifera												2		2	1		3
Prunus domestica		3										1		4			4
Prunus dulcis															1		1
Prunus persica															1		1

(Continues)

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total			
Prunus sp.												8		8			8
Raphanus sativus															1		1
Rubus fruticosus															1		1
Solanum americanum															1		1
ST27												7		7		2	9
Ginkgo biloba												1		1			1
Lagerstroemia sp.												1		1			1
Prunus cerasifera																1	1
Prunus dulcis												2		2		1	3
Prunus sp.												3		3			3
ST28												4		4		1	5
Ambrosia trifida												2		2		1	3
Helianthus sp.												1		1			1
Iva annua												1		1			1
ST32												2		2		1	3
Rubus fruticosus																1	1
Rubus sp.												2		2			2
ST34												1		1			1
Prunus cerasifera												1		1			1
ST35												1		1			1
Xanthium strumarium												1		1			1
ST36												1		1	1		2
Prunus cerasifera															1		1
Prunus sp.												1		1			1
ST37												3		3			3
Lupinus aridorum												1		1			1
Lupinus villosus												2		2			2
ST38												1		1			1
Platanus occidentalis												1		1			1
ST39												6		6			6
Koelreuteria bipinnata												1		1			1
Liquidambar styraciflua												4		4			4

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection															Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
Prunus sp.												1			1			1
ST40												4			4		1	5
Prunus cerasifera												3			3		1	4
Sambucus sp.												1			1			1
ST41												9			9		2	11
Prunus domestica																	1	1
Prunus salicina												3			3		1	4
Prunus sp.												2			2			2
Ulmus americana												2			2			2
Ulmus sp.												2			2			2
ST42												20			20		3	23
Ambrosia trifida												2			2		1	3
Sapindus saponaria												1			1			1
Vaccinium ashei												6			6			6
Vaccinium corymbosum												5			5		1	6
Vaccinium corymbosum × V. angustifolium hybrid																	1	1
Vaccinium sp.												6			6			6
ST43												21			21		2	23
Vaccinium corymbosum												3			3		1	4
Vaccinium corymbosum × V. angustifolium hybrid																	1	1
Vaccinium sp.												5			5			5
Vitis sp.												3			3			3
Vitis vinifera												10			10			10
ST44												2			2			2
Quercus palustris												1			1			1
Quercus rubra												1			1			1
ST45												6			6			6
Acer griseum												1			1			1
Ampelopsis cordata												1			1			1
Cercis canadensis												3			3			3
Gleditsia triacanthos												1			1			1

(Continues)

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total			
ST46												3		3			3
Celtis occidentalis												1		1			1
Chionanthus sp.												1		1			1
Prunus armeniaca												1		1			1
ST48												1		1			1
Sapindus saponaria												1		1			1
ST49												1		1			1
Prunus sp.												1		1			1
ST50												2		2			2
Fraxinus americana												1		1			1
Fraxinus sp.												1		1			1
ST51												5		5		1	6
Periwinkle (common name)												1		1			1
Vinca sp.												4		4		1	5
ST58												1		1		1	2
Ambrosia trifida												1		1		1	2
ST6					39							155	17	211	57	1	269
Acacia saligna												4		4			4
Acer granatense												1		1			1
Asparagus acutifolius												1		1			1
Calicotome spinosa												6		6			6
Calicotome villosa					1									1			1
Catharanthus roseus															1		1
Cistus albidus												5		5			5
Cistus monspeliensis					1							2		3			3
Cistus salviifolius												2		2			2
Coronilla valentina					1									1			1
Euryops chrysanthemoides					1									1			1
Genista scorpius												1		1			1
Helichrysum italicum					1							13		14			14
Helichrysum stoechas												6		6			6
Laurus nobilis					1							4		5			5

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total	
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
Lavandula angustifolia					1						2				3		3	
Lavandula dentata											4				4		4	
Lavandula latifolia											3				3		3	
Lavandula sp.					1										1		1	
Lavandula stoechas					1										1		1	
Lavandula × heterophylla					1										1		1	
Lavandula × intermedia					1					1					2		2	
Medicago sativa																4	4	
Nicotiana tabacum																5	5	
Olea europaea										2	3				5	31	36	
Phagnalon saxatile										4					4		4	
Polygala myrtifolia					10					7					17	1	18	
Prunus armeniaca										6					6		6	
Prunus avium					1										1		1	
Prunus cerasifera					1										1	1	2	
Prunus cerasus					1										1		1	
Prunus domestica										6					6		6	
Prunus dulcis										55	14				69	9	1	79
Quercus petraea																1	1	
Rhamnus alaternus										7					7		7	
Rosa canina					1										1		1	
Rubus ursinus																1	1	
Salix alba																1	1	
Salvia rosmarinus										7					7		7	
Santolina chamaecyparissus										2					2		2	
Spartium junceum					13					1					14		14	
Spartium sp.					1										1		1	
Ulex parviflorus										2					2		2	
Viburnum tinus										1					1		1	
Vitis vinifera																2	2	
ST6 and ST7					1										1		1	
Cistus monspeliensis					1										1		1	

(Continues)

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection															Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
ST6 and/or ST7					76										76			76
Acacia dealbata					1										1			1
Acer pseudoplatanus					2										2			2
Anthyllis hermanniae					1										1			1
Artemisia arborescens					2										2			2
Asparagus acutifolius					2										2			2
Calicotome villosa					1										1			1
Cercis siliquastrum					1										1			1
Cistus creticus					1										1			1
Cistus monspeliensis					2										2			2
Cistus salviifolius					2										2			2
Coronilla valentina					2										2			2
Cytisus scoparius					1										1			1
Cytisus sp.					2										2			2
Cytisus villosus					1										1			1
Euryops chrysanthemoides					1										1			1
Genista corsica					1										1			1
Genista ephedroides					2										2			2
Genista × spachiana					2										2			2
Hebe sp.					2										2			2
Helichrysum italicum					3										3			3
Lavandula angustifolia					2										2			2
Lavandula dentata					2										2			2
Lavandula sp.					3										3			3
Lavandula stoechas					2										2			2
Lavandula × heterophylla					2										2			2
Lavandula × intermedia					3										3			3
Medicago sativa					1										1			1
Metrosideros excelsa					2										2			2
Myrtus communis					2										2			2
Pelargonium graveolens					2										2			2
Pelargonium sp.					2										2			2

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total			
Phagnalon saxatile					1										1		1
Polygala myrtifolia					7										7		7
Polygala sp.					1										1		1
Prunus cerasifera					2										2		2
Prunus dulcis					1										1		1
Quercus suber					2										2		2
Rosa canina					1										1		1
Salvia rosmarinus					2										2		2
Spartium junceum					3										3		3
Westringia fruticosa					1										1		1
ST63		1													1		1
Prunus domestica		1													1		1
ST67		2													2	8	10
Bidens pilosa																1	1
Lepidium ruderales																1	1
Prunus domestica		2													2		2
Prunus salicina																4	4
Raphanus sativus																1	1
Solanum americanum																1	1
ST7					37					103	9	28			177	23	200
Acacia dealbata					1										1		1
Acacia longifolia										2					2		2
Acacia melanoxylon										1					1		1
Adenocarpus lainzii										2					2		2
Artemisia arborescens										2					2		2
Artemisia sp.										2					2		2
Asparagus acutifolius										1					1		1
Athyrium filix-femina										1					1		1
Berberis thunbergii										1					1		1
Calicotome spinosa											1				1		1
Calluna vulgaris										1					1		1
Catharanthus roseus																1	1

(Continues)

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection															Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
<i>Cistus creticus</i>					1										1		1	
<i>Cistus inflatus</i>										3					3		3	
<i>Cistus monspeliensis</i>					2										2		2	
<i>Cistus salviifolius</i>										1					1		1	
<i>Convolvulus cneorum</i>					2										2		2	
<i>Coprosma repens</i>										3					3		3	
<i>Coronilla valentina</i> subsp. <i>glauca</i>					2										2		2	
<i>Cytisus scoparius</i>										3					3		3	
<i>Dimorphotheca ecklonis</i>										1					1		1	
<i>Dodonaea viscosa</i>										2					2		2	
<i>Echium plantagineum</i>										1					1		1	
<i>Elaeagnus</i> × <i>submacrophylla</i>										1					1		1	
<i>Erica cinerea</i>										1					1		1	
<i>Erigeron canadensis</i>										1					1		1	
<i>Erodium moschatum</i>										1					1		1	
<i>Euryops chrysanthemoides</i>					1					1					2		2	
<i>Frangula alnus</i>										1					1		1	
<i>Gazania rigens</i>										2					2		2	
<i>Genista corsica</i>					1										1		1	
<i>Genista tridentata</i>										1					1		1	
<i>Hebe</i> sp.										3					3		3	
<i>Helichrysum italicum</i>					2										2		2	
<i>Hibiscus syriacus</i>										1					1		1	
<i>Hypericum androsaemum</i>										1					1		1	
<i>Hypericum perforatum</i>										1					1		1	
<i>Ilex aquifolium</i>										2					2		2	
<i>Laurus nobilis</i>										1					1		1	
<i>Lavandula angustifolia</i>										2					2		2	
<i>Lavandula dentata</i>										6					6		6	
<i>Lavandula</i> sp.										1					1		1	
<i>Lavandula stoechas</i>										1					1		1	
<i>Lavatera cretica</i>										1					1		1	

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total	
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
Lonicera periclymenum										1					1			1
Magnolia grandiflora										3					3			3
Magnolia × soulangeana										1					1			1
Medicago sativa					1					2					3	2		5
Metrosideros excelsa										2					2			2
Metrosideros sp.										1					1			1
Myrtus communis										2					2			2
Nerium oleander										1		1			2	1		3
Nicotiana tabacum																1		1
Olea europaea										1		7			8	4		12
Olea sp.												1			1			1
Pelargonium graveolens										1					1			1
Pelargonium sp.					1										1			1
Plantago lanceolata										1					1			1
Polygala myrtifolia					18							3			21	2		23
Prunus avium																1		1
Prunus cerasifera																1		1
Prunus domestica																2		2
Prunus dulcis					2							5	12		19	4		23
Prunus laurocerasus										1					1			1
Prunus persica										1					1			1
Prunus sp.												1			1			1
Pteridium aquilinum										1					1			1
Quercus petraea																1		1
Quercus robur										2					2			2
Quercus rubra										1		3			4			4
Quercus suber										3					3			3
Rosa sp.										1					1			1
Rubus fruticosus																1		1
Rubus ulmifolius										2					2			2
Salix alba																1		1
Salvia mellifera												3			3			3

(Continues)

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total			
Salvia officinalis										1					1		1
Salvia rosmarinus										2					2		2
Sambucus nigra										1					1		1
Santolina chamaecyparissus										4					4		4
Santolina sp.										1					1		1
Spartium junceum					2										2		2
Strelitzia reginae										1					1		1
Ulex europaeus										2					2		2
Ulex minor										2					2		2
Ulex sp.										2					2		2
Vinca major										2					2		2
Vinca sp.										1					1		1
Vitis vinifera																1	1
Westringia fruticosa					1										1		1
ST7 and ST88					1										1		1
Polygala myrtifolia					1										1		1
ST79					1										1		1
Polygala myrtifolia					1										1		1
ST8												16			16		16
Alnus rhombifolia												1			1		1
Carya illinoensis												2			2		2
Platanus occidentalis												8			8		8
Platanus sp.												2			2		2
Quercus palustris												1			1		1
Quercus sp.												1			1		1
Ulmus americana												1			1		1
ST81										103	1				104	17	121
Acacia saligna										2					2		2
Acacia sp.										1					1		1
Calicotome spinosa										1					1		1
Cistus albidus										4					4		4
Clematis cirrhosa										3					3		3

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection													Artificial infection Total	Not specified infection Total	Grand Total		
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown				Total	
Ficus carica											9				9			9
Fraxinus angustifolia											3				3			3
Genista valdes-bermejoi											2				2			2
Helichrysum stoechas											4				4			4
Laurus nobilis											1				1			1
Lavandula angustifolia											3				3			3
Lavandula dentata											3				3			3
Nerium oleander											1				1			1
Olea europaea											11	1			12	15		27
Olea europaea subsp. sylvestris											3				3			3
Phagnalon saxatile											1				1			1
Phillyrea angustifolia											3				3			3
Phlomis italica											2				2			2
Polygala myrtifolia											4				4			4
Prunus domestica											3				3			3
Prunus dulcis											16				16	1		17
Rhamnus alaternus											5				5			5
Salix alba																1		1
Salvia officinalis											3				3			3
Salvia rosmarinus											4				4			4
Santolina chamaecyparissus											5				5			5
Santolina magonica											2				2			2
Spartium junceum											2				2			2
Vitex agnus-castus											2				2			2
ST82																2		2
Vaccinium ashei																2		2
ST83																2		2
Vaccinium ashei																2		2
ST87											126				126	1		127
Acacia dealbata											4				4			4
Asparagus acutifolius											3				3			3
Calicotome spinosa											4				4			4

(Continues)

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection															Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
Calicotome villosa								3							3			3
Cercis siliquastrum								4							4			4
Cistus monspeliensis								4							4			4
Cistus salviifolius								4							4			4
Cistus sp.								6							6			6
Clematis vitalba								2							2			2
Cytisus scoparius								5							5			5
Elaeagnus angustifolia								4							4			4
Ficus carica								4							4			4
Helichrysum italicum								3							3			3
Helichrysum sp.								4							4			4
Laurus nobilis								3							3			3
Lavandula angustifolia								4							4			4
Lavandula dentata								2							2			2
Lavandula sp.								2							2			2
Lonicera implexa								3							3			3
Myrtus communis								3							3			3
Olea europaea																1		1
Phagnalon saxatile								3							3			3
Polygala myrtifolia								10							10			10
Prunus dulcis								12							12			12
Quercus ilex								1							1			1
Rhamnus alaternus								8							8			8
Rosa canina								2							2			2
Salvia rosmarinus								6							6			6
Scabiosa atropurpurea var. maritima								2							2			2
Spartium junceum								11							11			11
ST88					6										6			6
Coronilla valentina subsp. glauca					1										1			1
Dimorphotheca ecklonis					1										1			1
Euryops chrysanthemoides					1										1			1

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Artificial infection Total	Not specified infection Total	Grand Total			
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total						
Hebe sp.					1										1		1			
Lavandula × intermedia					1										1		1			
Polygala myrtifolia					1										1		1			
ST89					2										2		2			
Myoporum sp.					1										1		1			
Viburnum tinus					1										1		1			
ST9														29	29	4	33			
Polygala myrtifolia																1	1			
Quercus cerris												1			1		1			
Quercus coccinea												2			2		2			
Quercus falcata												1			1	1	2			
Quercus laevis												2			2		2			
Quercus nigra												1			1		1			
Quercus palustris												11			11		11			
Quercus petraea																1	1			
Quercus phellos												1			1		1			
Quercus robur												1			1		1			
Quercus rubra												5			5		5			
Quercus shumardii												1			1		1			
Quercus sp.												3			3		3			
Rubus fruticosus																1	1			
<i>pauca</i>	8	139	10	6	4							477			39	4	687	362	23	1072
ST11		52													52	14	3	69		
Catharanthus roseus																2		2		
Citrus sinensis		22													22	4	3	29		
Citrus sp.		29													29			29		
Coffea arabica																4		4		
Coffea sp.		1													1			1		
Nicotiana tabacum																4		4		
ST12		3													3		3	6		
Citrus sinensis		2													2		2	4		
Citrus sp.		1													1		1	2		

(Continues)

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection														Total	Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
ST13		12												12	89	3	104	
Arabidopsis thaliana															1		1	
Bidens pilosa															3		3	
Catharanthus roseus															14		14	
Citrus reticulata															3		3	
Citrus sinensis		6												6	23	3	32	
Citrus sp.		6												6	21		27	
Medicago sativa															3		3	
Nicotiana clevelandii															1		1	
Nicotiana tabacum															12		12	
Ocimum basilicum															3		3	
Periwinkle (common name)															1		1	
Solanum americanum															4		4	
ST14		8												8		4	12	
Coffea arabica		1												1			1	
Coffea sp.		6												6		2	8	
Prunus domestica																1	1	
Prunus sp.		1												1		1	2	
ST16		52												52	15	1	68	
Citrus sinensis															1		1	
Coffea arabica		2												2	7		9	
Coffea sp.		17												17		1	18	
Nicotiana tabacum															6		6	
Olea europaea		33												33	1		34	
ST53			8		4			477			1		3	493	217	6	716	
Acacia saligna								3						3			3	
Amaranthus retroflexus								3						3			3	
Asparagus acutifolius								3						3			3	
Catharanthus roseus								2						2	12		14	
Chenopodium album								5						5	1		6	
Cistus creticus								1						1			1	
Coffea arabica			3										2	5	1		6	

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection															Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
Coffea sp.													1	1		1	2	4
Dimorphotheca fruticosa								1								1		1
Dodonaea viscosa								2								2		2
Eremophila maculata								1								1		1
Erigeron bonariensis								3								3		3
Erigeron sp.								6								6		6
Erigeron sumatrensis								1								1		1
Euphorbia chamaesyce								2								2		2
Euphorbia terracina								1								1		1
Grevillea juniperina								1								1		1
Hebe sp.								1								1		1
Heliotropium europaeum								3								3		3
Jasminum azoricum																2		2
Laurus nobilis								2								2		2
Lavandula angustifolia								3								3		3
Lavandula sp.								1								1		1
Lavandula stoechas								2								2		2
Medicago sativa																1		1
Myoporum insulare								1								1		1
Myrtus communis								3								3		3
Nerium oleander			5					18								23	8	35
Nicotiana tabacum																	7	7
Olea europaea					1			341			1					343	158	501
Pelargonium fragrans								1								1		1
Pelargonium sp.								1								1		1
Periwinkle (common name)								1								1		1
Phillyrea latifolia								2								2		2
Pistacia vera								1								1		1
Polygala myrtifolia					1			23								24	9	33
Prunus avium								9								9	4	13
Prunus domestica																	2	2
Prunus dulcis								11								11	4	15

(Continues)

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection															Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
Prunus persica					1										1		1	
Quercus ilex					1										1		1	
Quercus petraea																1	1	
Rhamnus alaternus								4							4		4	
Salix alba																1	1	
Salvia rosmarinus									6						6		6	
Spartium junceum									2						2		2	
Vinca minor									1						1		1	
Vitis vinifera																5	5	
Westringia fruticosa									4						4		4	
Westringia glabra									1						1		1	
ST64		1													1		1	
Citrus sinensis		1													1		1	
ST65		1													1	2	3	
Catharanthus roseus																2	2	
Citrus sinensis		1													1		1	
ST66		1													1		1	
Coffea arabica		1													1		1	
ST68		1													1		1	
Coffea arabica		1													1		1	
ST69	6														6	1	7	
Citrus sinensis	4														4	1	5	
Olea europaea	2														2		2	
ST70		2													2	2	6	
Catharanthus roseus																2	2	
Hibiscus fragilis																	1	
Hibiscus rosa-sinensis		1													1		1	
Hibiscus sp.		1													1	1	2	
ST71		1													1	4	5	
Bidens pilosa																1	1	
Lepidium ruderales																1	1	
Prunus domestica		1													1		1	

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection															Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
Raphanus sativus																	1	1
Solanum americanum																	1	1
ST73			1										1	2			4	6
Catharanthus roseus																	1	1
Coffea arabica			1										1	2				2
Nerium oleander																	1	1
Nicotiana tabacum																	1	1
Polygala myrtifolia																	1	1
ST73 and ST53			1											1				1
Coffea arabica			1											1				1
ST74				6										6				6
Coffea arabica				6										6				6
ST78	2													2				2
Olea europaea	1													1				1
Prunus dulcis	1													1				1
ST80												38		38		15		53
Acacia saligna												2		2				2
Acacia sp.												1		1				1
Cistus albidus												4		4				4
Elaeagnus angustifolia												1		1				1
Genista hirsuta												2		2				2
Lavandula angustifolia												2		2				2
Lavandula dentata												3		3				3
Olea europaea												5		5	15			20
Olea europaea subsp. sylvestris												2		2				2
Polygala myrtifolia												3		3				3
Prunus dulcis												6		6				6
Salvia officinalis												1		1				1
Salvia rosmarinus												3		3				3
Thymus vulgaris												1		1				1
Ulex parviflorus												2		2				2
ST84		3												3				3

(Continues)

(Continued)

<i>X. Fastidiosa</i> subspecies/ sequence type	Natural infection															Artificial infection Total	Not specified infection Total	Grand Total
	AR	BR	CR	EC	FR	HN	IL	IT	MX	PT	ES	US	Unknown	Total				
Olea europaea		3													3		3	
ST85		1													1		1	
Olea europaea		1													1		1	
ST86		1													1		1	
Olea europaea		1													1		1	
sandyi			4		1	1						25	1	32	9	1	42	
ST5												25		25	4		29	
Hemerocallis sp.												1		1			1	
Jacaranda mimosifolia												1		1			1	
Magnolia grandiflora												1		1			1	
Nerium oleander												22		22	1		23	
Prunus dulcis																1	1	
Vinca major																2	2	
ST72			2			1							1	4	5	1	10	
Coffea arabica			2										1	3	1	1	5	
Coffea sp.						1								1			1	
Nerium oleander																1	1	
Olea europaea																3	3	
ST76			2		1									3			3	
Coffea arabica			1											1			1	
Coffea sp.			1											1			1	
Polygala myrtifolia					1									1			1	
Grand Total	8	145	39	6	168	1	2	604	22	112	388	451	5	1951	810	49	2810	

APPENDIX E

References included in this update

List of the 39 references included in this tenth update of the *Xylella* spp. host plant database. Informative data listed in Table 5 were extracted from those references and added to the database.

- Nita, M., Pfeiffer, D., Hansen, M. A., & Bush, E. (2015). Final Report for VA Wine Board. PROJECT TITLE: Preliminary data collection to understand Pierce's Disease ecosystem in VA (14–1693-02). <https://www.vawine.org/research-reports/>
- Schaad, N. W., Postnikova, E., Lacy, G., Fatmi, M., & Chang, C. J. (2004). *Xylella fastidiosa* subspecies: *X. fastidiosa* subsp. *fastidiosa* subsp. nov., *X. fastidiosa* subsp. *multiplex* subsp. nov., and *X. fastidiosa* subsp. *pauca* subsp. nov. *Systematic Applied Microbiology*, 27(3), 290–300. <https://doi.org/10.1078/0723-2020-00263>. Erratum in: *Syst Appl Microbiol.* 2004 Nov;27(6):763. PMID: 15214634.
- Ahmed, E., Musio, B., Todisco, S., Mastorilli, P., Gallo, V., Saponari, M., Nigro, F., Gualano, S., & Santoro, F. (2023). Non-targeted spectranomics for the early detection of *Xylella fastidiosa* infection in Asymptomatic Olive Trees, cv. Cellina di Nardò. *Molecules*, 28(22).
- Farrall, T., Abeynayake, S. W., Webster, W., Fiorito, S., Dinsdale, A., Whattam, M., Campbell, P. R., & Gambley, C. (2023). Development of a rapid, accurate, and field deployable LAMP-CRISPR-Cas12a integrated assay for *Xylella fastidiosa* detection and surveillance. *Australasian Plant Pathology*.
- Pucci, N., Scala, V., Cesari, E., Crosara, V., Fiorani, R., Aurora, A., Lucchesi, S., Tatulli, G., Barra, E., Ciarroni, S., De Amicis, F., Fascella, S., Giacobbi, F., Gaffuri, F., Gualandri, V., Landi, L., Loconsole, G., Molinatto, G., Pollastro, S., Raimondo, M. L., Rizzo, D., Roggia, C., Silletti, M. R., Talevi, S., Testa, M., & Loreti, S. (2023). An inter-laboratory comparative study on the influence of reagents to perform the identification of the *Xylella fastidiosa* subspecies using tetraplex Real Time PCR. *Horticulturae*, 9(9).
- D'Addabbo, A., Belmonte, A., Bovenga, F., Lovergine, F., Refice, A., Matarrese, R., Gallo, A., Mita, G., Abou Kubaa, R., Boscia, D., La Mantia, C., & Barbieri, V. (2023). Automatic Detection of *Xylella fastidiosa* in Aerial Hyperspectral and Thermal Data. *International Geoscience and Remote Sensing Symposium (IGARSS)*, 2023-July:3446–3449.
- Riaz, S., Tenschler, A., & Walker, M. A. (2023). Genetic Mapping of Pierce's Disease Resistance in Germplasm Collected from the Southwestern United States and Mexico. *American Journal of Enology and Viticulture*, 74(2).
- Martínez, S., Lacuesta, M., Relloso, J. B., Aragonés, A., Herrán, A., & Ortiz-Barredo, A. (2023). European grapevine cultivars and rootstocks show differential resistance to *Xylella fastidiosa* subsp. *fastidiosa*. *Horticulturae*, 9(11).
- Johnson, K. A., Chen, C., Bock, C. H., & Brannen, P. M. (2023). Recombinase polymerase amplification did not detect *Xylella fastidiosa* subsp. *multiplex* in peach seeds from phony peach disease trees. *Plant Health Progress*, 24, 516–518.
- Johnson, K. A., Brannen, P., Chen, C., & Bock, C. (2023). Visual assessment of phony peach disease: evaluating rater accuracy and reliability. *Plant Disease*, preprint.
- Matsumoto, G. O., Febres, V. J., Harmon, P. F., & Chaparro, J. X. (2023). Survey of *Xylella fastidiosa* Infection in Prunus Germplasm in Gainesville, FL, USA. *Hortscience*, 58(8):819–824.
- Martinez, M. G., Oliver, J. E., & Severns, P. M. (2023). Evidence of *Xylella fastidiosa* infection and associated thermal signatures in Southern Highbush Blueberry (*Vaccinium corymbosum* Interspecific Hybrids). *Plants-Basel*, 12(20).
- Cruz, A. C., Magana, S., Greco, D., De Bellis, L., & Luvisi, A. (2022). Detection of almond leaf scorch with artificial intelligence for the agriculture industry. 2022 5th International Conference On Artificial Intelligence For Industries, AI4I, 1–4.
- Zecharia, N., Vanunu, M., Dror, O., Hatib, K., Holland, D., Shtienberg, D., & Bahar, O. (2023). Seasonal dynamics and distribution of *Xylella fastidiosa* in infected almond trees. *Phytopathology*, preprint.
- Walker, N. C., Ruiz, S. A., Ferreira, T. R., Coletta-Filho, H. D., Le Houx, J., McKay Fletcher, D., White, S. M., & Roose, T. (2023). A high-throughput analysis of high-resolution X-ray CT images of stems of olive and citrus plants resistant and susceptible to *Xylella fastidiosa*. *Plant Pathology*.
- Rongai, D., Pucci, N., Cesari, E., Di Marco, C., & Valentini, F. (2023). Potential of endotherapeutic treatments with pomegranate peel extract to control the olive quick decline syndrome (OQDS) caused by *Xylella fastidiosa* subsp. *pauca*. *European Journal Of Plant Pathology*.
- Savoia, M. A., Fanelli, V., Miazzi, M. M., Taranto, F., Procino, S., Susca, L., Montilon, V., Potere, O., Nigro, F., & Montemurro, C. (2023). Apulian autochthonous olive germplasm: a promising resource to restore cultivation in *Xylella fastidiosa*-infected areas. *Agriculture*, 13(9).
- Saunders, C. V., Van Zyl, S., & Naegele, R. P. (2023). Virulence variability in *Xylella fastidiosa* and disease susceptibility of cultivated and wild grape species. *Plant Health Progress*, 24(2), 140–147.
- Burbank, L., Gomez, L., Shantharaj, D., Abdelsamad, N., Vasquez, K., Burhans, A., Ortega, B., Helm Rodriguez, S., Strickland, J., Krugner, R., De La Fuente, L., & Naegele, R. P. (2023). Virulence comparison of a comprehensive panel of *Xylella fastidiosa* Pierce's disease isolates from California. *Plant Disease*, preprint.
- Wei, W., & Burbank, L. (2023). Toxin-antitoxin system HigBA in *Xylella fastidiosa* is expressed at low temperature but does not impact virulence or grapevine recovery in greenhouse trials. *PhytoFrontiers*, 3(2), 337–346.
- Cesbron, S., Dupas, E., & Jacques, M. A. (2023). Evaluation of the AmplifyRP XRT+ kit for the detection of *Xylella fastidiosa* by recombinase polymerase amplification. *PhytoFrontiers*, 3(1):225–234.

22. Vizzarri, V., Ienco, A., Benincasa, C., Perri, E., Pucci, N., Cesari, E., Novellis, C., Rizzo, P., Pellegrino, M., Zaffina, F., & Lombardo, L. (2023). Phenolic Extract from Olive Leaves as a Promising Endotherapeutic Treatment against *Xylella fastidiosa* in Naturally Infected *Olea europaea* (var. *europaea*) Trees. *Biology-Basel*, 12(8).
23. Castro, C., Ndukwe, I., Heiss, C., Black, I., Ingel, B. M., Guevara, M., Sun, Y., Azadi, P., Sun, Q., & Roper, M. C. (2023). *Xylella fastidiosa* modulates exopolysaccharide polymer length and the dynamics of biofilm development with a β -1,4-endoglucanase. *MBIO*.
24. Abdelrazek, S., Bush, E., Oliver, C. L., Liu, H., Sharma, P., Aguilera Flores, M., Donegan, M. A., Almeida, R., Nita, M., & Vinatzer, B. (2023). A survey of *Xylella fastidiosa* in the US state of Virginia reveals wide distribution of both subspecies *fastidiosa* and *multiplex* in grapevine. *Phytopathology*.
25. Kahn, A. K. Z. (2023). Associations between plant hosts and the pathogen *X. fastidiosa*.
26. Lindow, S., Koutsoukis, R., Meyer, K. M., & Baccari, C. (2023). Control of Pierce's disease of grape with *Paraburkholderia phytofirmans* PsJN in the field. *Phytopathology*.
27. Huff, M., Hulse-Kemp, A. M., Scheffler, B. E., Youngblood, R. C., Simpson, S. A., Babiker, E., Staton, M. (2023). Long-read, chromosome-scale assembly of *Vitis rotundifolia* cv. Carlos and its unique resistance to *Xylella fastidiosa* subsp. *fastidiosa*. *BMC Genomics*, 24, 409.
28. Europhyt notification n. 2005 (Update 1).
29. Europhyt notification n. 2010 (Update 2).
30. Europhyt notification n. 2075 (Update 1).
31. Europhyt notification n. 2105 (Update 2).
32. Europhyt notification n. 2106 (Update 3).
33. Europhyt notification n. 2139 (Update 2).
34. Europhyt notification n. 2146 (Update 3).
35. Europhyt notification n. 2516 (Update 00).
36. Europhyt notification n. 2517 (Update 00).
37. Europhyt notification n. 2529 (Update 1).
38. Europhyt notification n. 753 (Update 23).
39. Europhyt notification n. -124 (Update 34).

ANNEX A

Links to data and interactive reports

Data are available as interactive reports on the Microstrategy platform at the following link: <https://www.efsa.europa.eu/en/microstrategy/xylella>

Raw data and related metadata are published in Zenodo in the EFSA Knowledge Junction community, this report refers to **version 10** (<https://doi.org/10.5281/zenodo.1339343>).