Update of the *Xylella* spp. host plant database – systematic literature search up to 30 June 2019

European Food Safety Authority (EFSA)

Abstract

Following a request from the European Commission, EFSA was asked to create and regularly update a database of host plant species of *Xylella* spp. In 2018, EFSA released a new *Xylella* spp. host plant database that was now updated with informative data extracted from 76 recent publications retrieved through an extensive literature search. This report is related to the third version of the database published in Zenodo in the EFSA Knowledge Junction community, covering articles selected from: a systematic literature review conducted up of 30 June 2019; Europhyt database up to 15 October 2019; and relevant articles identified by EFSA Horizon scanning and personal communications from experts.

Some data on *Xylella fastidiosa* strains and geographical coordinates included in the already published database were updated or modified with the purpose of increasing the accuracy and consistency of the database itself. Thirty-seven new host plant species of *X. fastidiosa*, identified through the data extracted from the selected publications, have been added to the database. Those plant species were reported as naturally infected, artificially infected or infected under unspecified conditions by subsp. *multiplex*, *pauca* or unknown (i.e. not reported in the publication) subspecies of *X. fastidiosa*. No additional data were retrieved for *Xylella taiwanensis*. Six new Sequence Types (STs) have been identified in Brazil, Italy and the USA. Information on the tolerant/resistant response of plant species or varieties to *X. fastidiosa* infection are also reported in the database. The overall number of *Xylella* spp. host plants reaches now 343 plant species, 163 genera and 64 families determined with two different detection methods, till 595 plant species, 275 genera and 85 families regardless the detection method applied. The EFSA database on *Xylella* spp. host plants is updated regularly with the aim to provide information and scientific support to risk assessors, risk managers and researchers dealing with *Xylella* spp.

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1. **Introduction**

1.1. **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 30th 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. Such report should specify the list of plants confirmed to be infected by at least two detection methods in field conditions or via vector transmission under experimental conditions and be published at least annually, or according to needs following agreements between EFSA and the European Commission. Such request is for the period 2016–2020.

1.2. **Interpretation of the Terms of Reference**

Following this request, European Food Safety Authority (EFSA) delivered in September 2018 a renovated and updated database of host plants of *Xylella* spp., taking into account both species of the genus *Xylella* (*X. fastidiosa* and *X. taiwanensis*) (EFSA, 2018). A systematic approach was applied according to the EFSA guidance on systematic literature review (EFSA, 2010) and detailed information on host plants, infection methods, geographic location, pest genetics, detection techniques and host status were collected from more than 850 references. The data structure of such database was renewed in order to improve consistency and transparency, and 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 periodically, and to publish new releases online together with a report. This Scientific Report provides an update on the database of host plants of *Xylella* spp., published in 2018 (EFSA, 2018). 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.
- Update of some data already inserted in the *Xylella* spp. host plants database published in 2018.
- 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)**

1 https://doi.org/10.5281/zenodo.1339343
2 https://www.efsa.europa.eu/en/microstrategy/xylella
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).

### 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          |                        |
| Data Citation Index               |                        |
| 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 30 June 2019. As the scope of the search was to retrieve references published after September 2017, the selected time span was from 30 September 2017 up to 30 June 2019. The search strings and the number of retrieved references are shown in Table 2.
The collected records were downloaded and imported into an EndNote X9 library (Clarivate Analytics). Duplicates were removed using EndNote X9 and the remaining references were uploaded on DistillerSR online\(^3\) together with the full texts in portable document format (pdf).

Nine additional documents containing relevant information were obtained from research groups, personal communications of experts, EFSA Horizon Scanning for Plant Health\(^4\) and Europhyt outbreak notifications\(^5\) (accessed on 15 October 2019).

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 *Xylella*/a *Xylella*-associated disease/a *Xylella* synonym the topic of the 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 to four questions (Table 4): three of them are descriptive (neutral) whereas the fourth has an inclusion/exclusion role.

### 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 cresspera 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 > 20170930 AND ORIG-LOAD-DATE < 20190701) | 160     |
| 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 cresspera 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 Fxit OR "rickettsialike bacteri*" OR "rickettsia like bacteri*") | 269     |

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3 https://www.evidencepartners.com/

4 https://efsa.onlinelibrary.wiley.com/doi/toc/10.2903/(ISSN)1831-4732.Horizon-scanning-for-plant-health

5 https://ec.europa.eu/food/plant/plant_health_biosecurity/harmful_organism_outbreaks_en
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.

### 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                                                                            |                                  | No                                               | Neutral            |
| Which is the type of the publication?                                        | Only one of the possible alternative answers can be selected                  | Peer-reviewed article                             | Neutral            |
| Article                                                                      |                                  | Article                                          | Neutral            |
| Book                                                                          |                                  | Book                                             | Neutral            |
| Conference proceedings                                                      |                                  | Conference proceedings                           | Neutral            |
| Abstract                                                                      |                                  | Abstract                                         | Neutral            |
| Technical publication/Report                                                  |                                  | Technical publication/Report                     | Neutral            |
| Other                                                                         |                                  | Other                                            | Neutral            |
| Is the *Xylella* host plant the main scope of the study?                     | Only one of the possible alternative answers can be selected                  | Yes                                              | Neutral            |
| No                                                                            |                                  | No                                               | Neutral            |
| Is *Xylella*/*Xylella*-associated disease/*Xylella* synonym studied in association to a host plant? | Only one of the possible alternative answers can be selected                  | Yes                                              | Included           |
| No                                                                            |                                  | No                                               | Excluded           |

### Table 5: Data extraction structure

| Extracted data | Description                                                                                                                                 |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| **General information** | *In this section, the general information about the study is reported*                                                                 |
| 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** | *The botanical identification of the plant, both as reported in the publication and according to the updated taxonomy of the EPPO Global Database, is reported in this section* |
| Plant EPPO code | EPPO code of the plant species, from the EPPO global database. 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                                                                                                   |
| Plant genus    | Plant genus, from the EPPO global database                                                                                                     |
| Plant species  | Plant species, from the EPPO global database                                                                                                   |
| 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                                                                                      |

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6 [https://gd.eppo.int/](https://gd.eppo.int/)
### Infection information

**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 the artificial vector transmission.

**Location type** The place where the plant was placed: natural habitat, greenhouse, screenhouse, interception, not specified.

### Geographic information

*In this section, the geographical location of the plant is reported, as detailed as possible. In case of intercepted plant, the reported location is the geographical origin of the plant and not the country and location where it was intercepted.*

**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

*Information about the pest is reported in this section, together with genetic data.*

**Pest EPPO code** EPPO code of the pest, from the EPPO global database.

**Pest species** Name of *Xylella* spp., from the EPPO global database.

**Pest subspecies** *Xylella fastidiosa* subspecies, from the EPPO global database. If the subspecies is inferred from another publication, a note is added in the genotyping comment.

**Reported pest** Name of *Xylella* spp. as reported in the publication (from 1930 up to now): Alfalfa dwarf virus, Morus suffodiens virus, Phony peach bacterium, Pierce’s disease bacterium, Pierce’s disease virus, *Rickettsia*-like bacteria, Rod-shaped bacteria, *Xylella fastidiosa*, *Xylella taiwanensis*, Xylem-inhabiting bacteria.

**Disease** Name of the disease caused by *Xylella* spp., as reported in the publication: Alfalfa dwarf, Almond leaf scorch, Bacterial leaf scorch, Blueberry bacterial leaf scorch, Citrus variegated chlorosis, Coffee leaf scorch, Crespera, 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 disease, Plum leaf scald, Potato purple top disease, Ragweed stunt, Sweetgum dieback, Sycamore leaf scorch.

**Strain** Name of the strain of *Xylella* spp., as reported in the publication.

**MLST (Multilocus Sequence Type)** Sequence Type (ST) of *Xylella fastidiosa*, 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

*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.*

**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.
2.4. Data updated in this database version

Some information already included in the *Xylella* spp. host plant database published in 2018 were updated, with the purpose of increasing accuracy and consistency of the database itself.

References containing X. fastidiosa strains for which the subspecies was not reported in the publication were cross-checked with other references in the attempt of identifying the subspecies to which the strain belongs. In some cases, the author of the reference was contacted to ask additional information on the genotyping of the strain. Whenever the subspecies was identified, it was inserted in the related record and a comment was added in the genotyping comment ‘s column.

The section on geographical coordinates have been modified and updated. Column ‘Location’ includes the administrative location description according to NUTS (Eurostat, for EU countries) or GAUL (FAO, for the rest of the world) territorial unit nomenclature and more precise administrative information if available in the publication. Additional information reported in the publication, such as the research centre name or the experimental field station where the study was conducted, are specified in the new column ‘Additional Location’.

The geographical coordinates were inserted only when explicitly reported in the publication. Other geographical coordinates previously present in the database and inferred from different sources have been removed for consistency with the related documents and for avoiding misunderstandings in relation (e.g.) to extrapolated geographical features. For further information on the origin and on what exactly those coordinates are referred to, the publication should be consulted.

Records present in the update published in 2018 and containing information that have been afterwards updated (such as from Europhyt notifications, or from ongoing artificial infection experiments) have been modified with the most updated information and results.

2.5. 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.
2.5.1. 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 3 (https://doi.org/10.5281/zenodo.1339343).

2.5.2. 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: symptoms observation on the test plant in experimental vector transmission, ELISA, other immunological techniques, PCR-based methods, sequencing and culture) or positive with one method (between: sequencing, culture).

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 culture) or positive with one method (between: sequencing, culture).

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 culture).

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 culture).

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, culturing).

3. Results

3.1. Results of the literature review

3.1.1. Collected literature and screening for relevance

The extensive literature search was conducted on 30 June 2019 on Web of Science and Scopus platforms and 429 references were collected. Duplicates were removed and 262 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, 109 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 153 references were subjected to the second step of the screening process, i.e. the full text screening. Sixty-seven references, in which *Xylella* spp. is studied is association to a host plant (i.e. *in vivo*), were selected and informative data listed in Table 5 were extracted.

Nine additional references retrieved through personal communication of experts, EFSA Horizon Scanning for Plant Health\(^7\) and Europhyt outbreak notifications and containing informative data were included in the data extraction.

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\(^7\) https://efsa.onlinelibrary.wiley.com/doi/toc/10.2903/(ISSN)1831-4732.Horizon-scanning-for-plant-health
3.1.2. Unconfirmed studies

Compared to the previous version of the database, two additional publications and one single record were considered unconfirmed/dubious. Those unconfirmed studies are included in the data extraction but excluded from the data analysis.

The paper of Li et al. (2002) reporting experimental infection of *Vitis vinifera* plants was considered unconfirmed/dubious because, as stated by the EFSA PLH Panel (2015), an aggressive inoculation procedure was used, making difficult to discriminate between stress induced by the treatment and the disease caused by the pathogen itself.

One record regarding a positive PCR result in one *Quercus pubescens* plant artificially inoculated by *X. fastidiosa* subsp. *pauca* strain CoDiRO was considered unconfirmed/dubious as the publication reports that further confirmation tests still need to be performed (Technical report of POnTE and XF-Actors, 2017), but no updated results have been published so far.

The paper by Naqvi et al. (2017) reporting the presence of *Citrus* plants affected by *Citrus variegated chlorosis* in Pakistan was considered unconfirmed/dubious as the presence of *X. fastidiosa* and its related citrus disease has never been confirmed in this country.

3.2. Update of records already included in the database published in 2018

The records already included in the database published in 2018 (EFSA, 2018) and for which no *X. fastidiosa* subspecies was assigned to the strain reported in the publication were cross-checked with...
the references cited in the publication and/or the author of the article was contacted in order to identify the *X. fastidiosa* subspecies. Whenever the subspecies was identified, it was inserted in the related record and a comment on the source of information was inserted in the genotyping comment’s column. A *X. fastidiosa* subspecies was assigned to 734 records, of which 356 and 306 records were assigned to the subspecies *fastidiosa* and *pauca*, respectively. One record was identified as belonging to the species *X. taiwanensis* instead of *X. fastidiosa* subsp. *unknown*. In 58 records, it was also possible to assign the Sequence type (ST) to the strain, thanks to personal communications of the authors of the publications.

Following the new rationale for reporting geographic coordinates (see Section 2.4), coordinates were included only when specified in the related publications. Such coordinates may refer to single plants, fields or administrative divisions at different level (town, province, regions etc.) and with different level of precision. For more information on the reported geographical coordinates, the related publication was the only source of information that was consulted for this database.

### 3.3. Host plant species of *Xylella* spp.

The updated total numbers of plant species, genera and families host of *Xylella* spp., according to the classification system described in Section 2.5.2, are reported in Table 6. The numbers vary from 343 host plant species, 163 genera and 64 families 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 culture) or positive with one method (between: sequencing, culture)) to 595 plant species, 275 genera and 85 families of category E (i.e. all positives plant species reported, regardless of the detection methods). Due to the update of some data already present in the first version of the database (EFSA, 2018), some host plants already present in the database were reclassified in a different category.

**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 2.5.2)

|                        | A   | B   | C   | D   | E   |
|------------------------|-----|-----|-----|-----|-----|
| Number of host plant species | 343 | 348 | 578 | 587 | 595 |
| Number of host genera   | 163 | 164 | 274 | 274 | 275 |
| Number of host families  | 64  | 64  | 85  | 85  | 85  |

Compared to the database published in 2018 (EFSA, 2018), 37 new host plant species have been identified for *X. fastidiosa*. Three plant species have been removed from the list of host plants: data on *Citrus volkameriana* (reported infected by *X. fastidiosa* in unspecified conditions) were erroneously interpreted, data on *Prunus × amygdalo-persica* artificially infected by *X. fastidiosa* subsp. *pauca* strain CoDiRO were updated, while the plant species *Quercus pubescens* has been now considered as unconfirmed (see Section 3.1.2). Details on those 37 new host plants are reported in Table 7. No new host plant species have been identified for the species *X. taiwanensis*.

Thirty new plant species have been identified as host plants of *X. fastidiosa* according to category A, and seven according to category C (as described in Section 2.5.2). Most of the new host plant species were naturally infected and identified both in the EU (France, Italy, Portugal and Spain) and outside the EU (Iran and the United States of America). *Pistacia vera* was also tested in experimental conditions and three plant taxa (*Hibiscus fragilis, Hibiscus sp., Vaccinium darrowii*) were reported infected in not specified conditions. The *X. fastidiosa* subspecies identified in the new host plants were *multiplex, pauca* or not reported (*unknown*).

**Table 7:** New host plants of *X. fastidiosa*. For each host plant, the infection method (natural, artificial or unspecified), the country (only for natural infections), the *X. fastidiosa* subspecies (*pauca, multiplex* or *unknown* (i.e. not reported in the publication)) and the category (A or C – see Section 2.5.2) are reported

| Plant species       | Infection method | Country   | *X. fastidiosa* subspecies | Category |
|---------------------|------------------|-----------|----------------------------|----------|
| *Amaranthus retroflexus* | Natural     | Italy     | *pauca*                    | A        |
| *Amaranthus retroflexus* | Natural     | Italy     | unknown                    | A        |
| *Artemisia sp.*    | Natural         | Portugal  | *multiplex*                | A        |

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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, 9 and 10, whereas the pathogen species *Xylella taiwanensis* was recorded only in the plant species *Pyrus pyrifolia*.

Considering the plant species naturally infected, the highest number of host plants is recorded for the subspecies *multiplex* (141 plant species for cat. A) and for unknown *X. fastidiosa* subspecies (152 plant species for cat. A, increasing to 371 for cat. E). The highest number of plant species artificially infected by *X. fastidiosa* is recorded for unknown subspecies (89 plant species for cat. A, rising to 2015 for cat. E) and for the subspecies *fastidiosa* (37 for cat. A).

| Plant species             | Infection method | Country            | X. fastidiosa subspecies | Category |
|--------------------------|------------------|--------------------|--------------------------|----------|
| *Calicotome* sp.         | Natural          | France             | unknown                  | C        |
| *Campsis radicans*       | Natural          | United States      | unknown                  | C        |
| *Chamaesyce canescens*   | Natural          | Italy              | *paucia*                 | A        |
| *Cistus albidus*         | Natural          | Spain              | unknown                  | A        |
| *Cistus × incanus*       | Natural          | Italy              | *multiplex*              | C        |
| *Convolvulus cneorum*    | Natural          | France             | *multiplex*              | A        |
| *Cyttisus spinosa*       | Natural          | France             | *multiplex*              | A        |
| *Diospyros kaki*         | Natural          | United States      | unknown                  | A        |
| *Elaeagnus angustifolia* | Natural          | Italy              | *multiplex*              | A        |
| *Erigeron karvinskianus* | Natural          | France             | *multiplex*              | A        |
| *Erigeron sp.*           | Natural          | Italy              | *paucia*                 | A        |
| *Euryops pectinatus*     | Natural          | France             | *multiplex*              | A        |
| *Hebe elliptica*         | Natural          | France             | *multiplex*              | A        |
| *Helichrysum sp.*        | Natural          | Italy              | *multiplex*              | A        |
| *Helichrysum stoechas*   | Natural          | France             | *multiplex*              | A        |
| *Helichrysum stoechas*   | Natural          | Spain              | unknown                  | A        |
| *Hibiscus fragilis*      | Not specified    |                   | *paucia*                 | A        |
| *Hibiscus sp.*           | Not specified    |                   | *paucia*                 | A        |
| *Ilex aquifolium*        | Natural          | Portugal            | *multiplex*              | A        |
| *Lavandula latifolia*    | Natural          | Spain              | unknown                  | A        |
| *Ligustrum sinense*      | Natural          | United States      | unknown                  | C        |
| *Medicago arborea*       | Natural          | France             | *multiplex*              | A        |
| *Osteospermum ecklonis*  | Natural          | France             | *multiplex*              | A        |
| *Osteospermum fruticosum*| Natural          | Italy              | *paucia*                 | A        |
| *Phlomis fruticosa*      | Natural          | France             | *multiplex*              | A        |
| *Pistacia vera*          | Artificial       |                   | *multiplex*              | A        |
| *Pistacia vera*          | Natural          | Iran               | *multiplex*              | A        |
| *Prunus serotina*        | Natural          | United States      | unknown                  | C        |
| *Robinia pseudoacacia*   | Natural          | United States      | *multiplex*              | A        |
| *Santolina chamaecyparissus* | Natural      | France             | *multiplex*              | A        |
| *Streptizia reginae*     | Natural          | France             | *multiplex*              | A        |
| *Teucrum capitatum*      | Natural          | Spain              | unknown                  | A        |
| *Ulex europaeus*         | Natural          | Portugal            | *multiplex*              | A        |
| *Ulex minor*             | Natural          | Portugal            | *multiplex*              | A        |
| *Vaccinium ashei*        | Natural          | United States      | *multiplex*              | A        |
| *Vaccinium ashei*        | Natural          | United States      | unknown                  | A        |
| *Vaccinium darrowii*     | Not specified    |                   | unknown                  | C        |
| *Vaccinium elliottii*    | Natural          | United States      | unknown                  | C        |
The plant species behind the numbers shown in Tables 8, 9 and 10 are listed in Appendices A, B, 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 ‘top 10’ host plant families, i.e. the families owning the highest numbers of host plant species, are shown in Figure 2. Fabaceae appears to be the plant family owning the highest number of host plants (61), followed by Asteraceae (57) and Vitaceae (48).

### Table 8: Number of host plant species, naturally infected, susceptible to the different *X. fastidiosa* subspecies according to categories A, B, C, D, E

| Category | fastidiosa | fastidiosa/ sandyi | morus | multiplex | pauca | sandyi | tashke | unknown |
|----------|------------|-------------------|-------|-----------|-------|--------|--------|---------|
| A        | 39         | 2                 | 4     | 141       | 45    | 6      | 1      | 152     |
| B        | 39         | 2                 | 4     | 141       | 45    | 6      | 1      | 157     |
| C        | 43         | 2                 | 4     | 146       | 47    | 7      | 1      | 354     |
| D        | 43         | 2                 | 4     | 146       | 47    | 7      | 1      | 360     |
| E        | 44         | 2                 | 4     | 147       | 47    | 7      | 1      | 371     |

### Table 9: Number of host plant species, artificially infected, susceptible to the different *X. fastidiosa* subspecies according to categories A, B, C, D, E

| Category | fastidiosa | morus | multiplex | pauca | sandyi | tashke | unknown |
|----------|------------|-------|-----------|-------|--------|--------|---------|
| A        | 37         | 2     | 18        | 15    | 5      | 0      | 89      |
| B        | 38         | 2     | 18        | 16    | 5      | 0      | 94      |
| C        | 50         | 2     | 22        | 24    | 6      | 1      | 201     |
| D        | 50         | 2     | 22        | 24    | 6      | 1      | 207     |
| E        | 53         | 2     | 23        | 24    | 6      | 1      | 215     |

### 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

| 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      |
Infection by *Xylella* spp. can be detected using different detection techniques, sometimes providing non-convergent results (i.e. the sample is positive to one or more detection methods but negative for others). Records reporting non-convergent results are reported in the database but have not been included in the data analysis.

### 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) in natural, artificial and not specified conditions is reported in Appendix D. For each plant species, the number of records reporting infection by that specific ST is counted. For natural infection, it is also reported the country where the plant species have been identified, whereas for artificial and not specified infection only, the total number of records is present in the Appendix.

Totally, 1,202 records reporting information on 194 plant species infected by 87 different STs have been reported in the database. Most of the records (884) 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) and Europe (Portugal, Spain, France and Italy). The highest number of records for artificial infections belong to STs of subsp. *pauca* (127 records), whereas ST1 (subsp. *fastidiosa*) is the most studied ST with 95 records.

Compared to the previous version of the database (EFSA, 2018), six new STs have been identified worldwide. In the United States of America, *Vaccinium ashei* has been reported as infected by STs 82 and 83 (subsp. *multiplex*), and in Brazil STs 84, 85 and 86 (subsp. *pauca*) have been identified in *Olea europaea* plants. In Italy, ST 87 belonging to subsp. *multiplex* has been detected in several plant species in Monte Argentario (Tuscany).

### 3.5. Tolerant and resistant response of plant species

Information on tolerant and resistant response of plant species to *X. fastidiosa* infection have been also reported in the database. The list of plant genera and species for which tolerant and resistant response have been identified is reported in Table 11. Information on tolerant/resistant status have been reported in 64 plant species with a total number of 491 records, but the most studied genera are *Vitis*, *Citrus* and *Prunus* (224, 175 and 54 records, respectively), reflecting the important economic value of their plant species.
Table 11: Number of records reporting tolerant/resistant response for plant genus and species

| Plant genus and species     | Number of records |
|-----------------------------|-------------------|
| Arabidopsis                 | 4                 |
| Arabidopsis thaliana        | 4                 |
| Citrus                      | 175               |
| Citrus celebica             | 1                 |
| Citrus clementina           | 4                 |
| Citrus jambhiri             | 2                 |
| Citrus junos                | 1                 |
| Citrus latifolia            | 1                 |
| Citrus limettioides         | 1                 |
| Citrus limon                | 14                |
| Citrus medica               | 1                 |
| Citrus natsudaidai          | 1                 |
| Citrus paradisi             | 5                 |
| Citrus reticulata           | 9                 |
| Citrus reticulata × C. sinensis × C. paradisi | 1 |
| Citrus sinensis             | 8                 |
| Citrus sp.                  | 70                |
| Citrus tangerina            | 32                |
| Citrus × nobilis            | 11                |
| Citrus × tangelo             | 13                |
| Coffea                      | 5                 |
| Coffea arabica              | 4                 |
| Coffea sp.                  | 1                 |
| Fortunella                  | 1                 |
| Fortunella margarita        | 1                 |
| Medicago                    | 2                 |
| Medicago sativa             | 2                 |
| Olea                        | 14                |
| Olea europaea               | 14                |
| Platanus                    | 2                 |
| Platanus sp.                | 2                 |
| Poncirus                    | 3                 |
| Poncirus trifoliata         | 3                 |
| Prunus                      | 54                |
| Prunus angustifolia         | 1                 |
| Prunus armeniaca            | 3                 |
| Prunus avium                | 5                 |
| Prunus cerasus              | 2                 |
| Prunus domestica            | 3                 |
| Prunus dulcis               | 8                 |
| Prunus persica              | 7                 |
| Prunus salicina             | 10                |
| Prunus sp.                  | 13                |
| Prunus × amygdalo-persica   | 2                 |
| Quercus                     | 2                 |
| Quercus ilex                | 2                 |
| Vaccinium                   | 5                 |
| Vaccinium corymbosum        | 5                 |
Eleven categories have been created to group different tolerant/resistant response to *X. fastidiosa* infection. Those categories include the plant response/s for which the authors of the publication considered that plant as tolerant/resistant to *X. fastidiosa* infection. One hundred and eight publications, recorded in 491 record (245 for artificial infections), report information on tolerance and resistance outcome to *X. fastidiosa* infection (Table 12). In 41 publications, the authors consider the plant tolerant or resistant, but without adding further details, whereas in 19 publications, the lower bacterial populations harboured by the plant was considered the demonstration of the tolerant/resistant status of the plant. With more than 70 records, the lack of infection and lack or reduction of symptoms (in both natural and artificial infections) are the two most reported tolerant/resistant outcome.

| Plant genus and species | Number of records |
|------------------------|-------------------|
| *Vitis*                | 224               |
| *Vitis aestivalis*     | 2                 |
| *Vitis arizonica*      | 5                 |
| *Vitis arizonica hybrid* | 6            |
| *Vitis arizonica × V. rupestris* | 6   |
| *Vitis arizonica × V. vinifera* | 1 |
| *Vitis arizonica/candicans* | 3 |
| *Vitis arizonica/candicans × V. rupestris* | 2 |
| *Vitis arizonica/girdiana* | 1 |
| *Vitis berlandieri × riparia hybrids* | 6 |
| *Vitis berlandieri × V. rupestris* | 4 |
| *Vitis candicans*      | 2                 |
| *Vitis cinerea × V. berlandieri* | 2 |
| *Vitis girdiana*       | 2                 |
| *Vitis munsoniana*     | 3                 |
| *Vitis popenoei*       | 1                 |
| *Vitis rotundifolia*   | 58                |
| *Vitis rotundifolia × V. rupestris* | 1 |
| *Vitis simpsonii*      | 1                 |
| *Vitis sp.*            | 76                |
| *Vitis tiliaefolia*    | 1                 |
| *Vitis vinifera*       | 25                |
| *Vitis aestivalis var. smalliana* | 4  |
| *Vitis aestivalis var. smalliana × V. simpsonii* | 4 |
| *Vitis aestivalis var. smalliana × V. vinifera* | 1 |
| *Vitis nesbittiana*    | 1                 |
| *Vitis rufotomentosa*  | 1                 |
| *Vitis shuttleworthii* | 5                 |
| **TOTAL**              | **491**           |
4. Conclusions

Following a request of the European Commission, EFSA was asked in 2016 to create, maintain and regularly update a database of host plant species of *Xylella* spp. In 2018, EFSA released a new and renovated *Xylella* spp. host plant database (EFSA, 2018), that was now updated.

An extensive literature search was performed including all scientific papers published up to 30 June 2019, as well as additional documents obtained from research groups, personal communications of experts, EFSA Horizon Scanning activities for Plant Health and Europhyt outbreak notifications (last accessed on 15 October 2019). By these searches, 271 recent publications were collected and screened to select the publications in which *Xylella* spp. was studied in association with a plant species. As a result, 76 publications were selected and informative data on botanical identification of the plant species, infection method, geographical information, *Xylella* spp. genetics, detection techniques and tolerant/resistant response of the plant were extracted.

Some data already included in the database published in 2018 were updated: in particular, the *X. fastidiosa* subspecies was identified for several strains, thanks to references review and author’s personal communications; in this update, only geographical coordinates explicitly reported in the publications were reported.

Thirty-seven new host plant species of *X. fastidiosa* were added to the database. Most of those plant species were naturally infected and identified in France, Iran, Italy, Portugal, Spain and the United States of America. *X. fastidiosa* subspecies infecting the new host plants were *multiplex*, *pauca* or not identified (unknown/not reported in the study). No new data were retrieved for *X. taiwanensis* that up to now has been reported only in *Pyrus pyrifolia* plants.

The overall number of *Xylella* spp. host plants reached 343 plant species, 163 genera and 64 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 culture) or positive with one method (between: sequencing, culture), till 595 plant species, 275 genera and 85 families for category E (i.e. all positives plant species reported, regardless of the detection methods).

Since the release of the first version of this database (EFSA, 2018), six new Multilocus Sequence Types (STs) have been identified worldwide: STs 82 and 83 (subsp. *multiplex*) in the United States of America, STs 84, 85 and 96 (subsp. *pauca*) in Brazil and ST 87 (subsp. *multiplex*) in Italy.

Information on tolerant/resistant status were reported for 64 plant species in 108 publications, with a total number of 491 records. The economically important *Vitis*, *Citrus* and *Prunus* genera are the most studied and reported plant taxa.

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### Table 12: Number of records and publications for tolerance/resistance category

| Tolerance/resistance category | Number of records | Number of publications |
|------------------------------|-------------------|-----------------------|
| Lack of infection or Negative reading | 78    | 42    | 14 |
| Lack of systemic movement | 50    | 7     |
| Lack or reduction of symptoms | 75    | 74    | 10 |
| Lack or reduction of symptoms – Lower bacterial population | 3    | 12    | 7 |
| Lack or reduction of symptoms – Lower bacterial population – Lower disease incidence | 2    | 2     |
| Lack or reduction of symptoms – Lower disease incidence | 2    | 1     |
| Lower bacterial population | 6    | 46    | 19 |
| Lower bacterial population – Lower disease incidence | 2    | 2     |
| Lower disease incidence | 4    | 2     |
| Not persistent infection | 3    | 5     | 3 |
| Reported as tolerant/resistant_no details | 22   | 16    | 49  |
| **TOTAL** | **197** | **245** | **49** |

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The EFSA database on Xylella spp. host plants will be updated regularly and it aims 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 3 (https://doi.org/10.5281/zenodo.1339343).

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Abbreviations
DCF Data Collection Framework
EFSA PLH Panel EFSA Panel on Plant Health
ELISA enzyme-linked immunosorbent assay
EPPO European and Mediterranean Plant Protection Organization
ETL Extract Transform Load
PCR polymerase chain reaction
S-DWH EFSA Scientific Data Warehouse
ST sequence type
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 2.5.2):

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 culture) or positive with one method (between: sequencing, culture).

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 culture) or positive with one method (between: sequencing, culture).

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 culture).

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 culture).

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, culturing).

| Plant species                  | Pest              | Category |
|--------------------------------|-------------------|----------|
| Acacia saligna                 | Xf subsp. unknown | A        |
| Acer rubrum                    | Xf subsp. unknown | A        |
| Albizia julibrissin            | Xf subsp. unknown | A        |
| Amaranthus retroflexus         | Xf subsp. unknown | A        |
| Ambrosia psilostachya          | Xf subsp. unknown | A        |
| Ambrosia trifida               | Xf subsp. unknown | A        |
| Ampelopsis arborea             | Xf subsp. unknown | A        |
| Ampelopsis brevipedunculata    | Xf subsp. unknown | A        |
| Ampelopsis brevipedunculata var. hancei | Xf subsp. unknown | A |
| Asparagus acutifolius          | Xf subsp. unknown | A        |
| Baccharis halimifolia          | Xf subsp. unknown | A        |
| Baccharis sp.                  | Xf subsp. unknown | A        |
| Brassica sp.                   | Xf subsp. unknown | A        |
| Callicarpa americana           | Xf subsp. unknown | A        |
| Carya illinoinensis            | Xf subsp. unknown | A        |
| Catharanthus roseus            | Xf subsp. unknown | A        |
| Cercis occidentalis            | Xf subsp. unknown | A        |
| Chamaecrista fasciculata       | Xf subsp. unknown | A        |
| Chionanthus retusus            | Xf subsp. unknown | A        |
| Chitalpa tashkentensis         | Xf subsp. unknown | A        |
| Cistus albidus                 | Xf subsp. unknown | A        |
| Cistus creticus                | Xf subsp. unknown | A        |
| Citrus aurantium               | Xf subsp. unknown | A        |
| Citrus celebica                | Xf subsp. unknown | A        |
| Citrus jambhiri                | Xf subsp. unknown | A        |
| Citrus limon                   | Xf subsp. unknown | A        |
| Citrus medica                  | Xf subsp. unknown | A        |
| Citrus natsudaidai             | Xf subsp. unknown | A        |
| Plant species               | Pest      | Category |
|-----------------------------|-----------|----------|
| Citrus paradisi             | Xf subsp. unknown | A         |
| Citrus reticulata           | Xf subsp. unknown | A         |
| Citrus sinensis             | Xf subsp. unknown | A         |
| Citrus sp.                  | Xf subsp. unknown | A         |
| Citrus tangerina            | Xf subsp. unknown | A         |
| Citrus × nobilis            | Xf subsp. unknown | A         |
| Citrus × tangelo            | Xf subsp. unknown | A         |
| Coelorachis cylindrica      | Xf subsp. unknown | A         |
| Coffea arabica              | Xf subsp. unknown | A         |
| Coffea sp.                  | Xf subsp. unknown | A         |
| Conium maculatum            | Xf subsp. unknown | A         |
| Digitaria sp.               | Xf subsp. unknown | A         |
| Diospyros kaki              | Xf subsp. unknown | A         |
| Diplocyclos palmatus        | Xf subsp. unknown | A         |
| Dodonaea viscosa            | Xf subsp. unknown | A         |
| Euphorbia terracina         | Xf subsp. unknown | A         |
| Fagus crenata               | Xf subsp. unknown | A         |
| Fatsia japonica             | Xf subsp. unknown | A         |
| Ficus carica                | Xf subsp. unknown | A         |
| Fraxinus pennsylvanica      | Xf subsp. unknown | A         |
| Genista × spachiana         | Xf subsp. unknown | A         |
| Ginkgo biloba               | Xf subsp. unknown | A         |
| Grevillea juniperina        | Xf subsp. unknown | A         |
| Helianthus annuus           | Xf subsp. unknown | A         |
| Helichrysum stoechas        | Xf subsp. unknown | A         |
| Hemerocallis sp.            | Xf subsp. unknown | A         |
| Hibiscus schizopetalus      | Xf subsp. unknown | A         |
| Humulus scandens            | Xf subsp. unknown | A         |
| Ilex vomitoria              | Xf subsp. unknown | A         |
| Iva annua                   | Xf subsp. unknown | A         |
| Jacaranda mimosifolia       | Xf subsp. unknown | A         |
| Juglans sp.                 | Xf subsp. unknown | A         |
| Juniperus ashei             | Xf subsp. unknown | A         |
| Lagerstroemia indica        | Xf subsp. unknown | A         |
| Lagerstroemia sp.           | Xf subsp. unknown | A         |
| Laurus nobilis              | Xf subsp. unknown | A         |
| Lavandula angustifolia      | Xf subsp. unknown | A         |
| Lavandula dentata           | Xf subsp. unknown | A         |
| Lavandula latifolia         | Xf subsp. unknown | A         |
| Ligustrum lucidum           | Xf subsp. unknown | A         |
| Liquidambar styraciflua     | Xf subsp. unknown | A         |
| Lonicera japonica           | Xf subsp. unknown | A         |
| Lupinus aridorum            | Xf subsp. unknown | A         |
| Lupinus villosus            | Xf subsp. unknown | A         |
| Magnolia grandiiflora       | Xf subsp. unknown | A         |
| Mallotus paniculatus        | Xf subsp. unknown | A         |
| Medicago sativa             | Xf subsp. unknown | A         |
| Mimosa sp.                  | Xf subsp. unknown | A         |
| Modiola caroliniana         | Xf subsp. unknown | A         |
| Morus alba                  | Xf subsp. unknown | A         |
| Plant species                      | Pest | Category |
|-----------------------------------|------|----------|
| Morus rubra                       | Xf   | A        |
| Morus sp.                         | Xf   | A        |
| Myoporum insulare                 | Xf   | A        |
| Myrtus communis                   | Xf   | A        |
| Nandina domestica                 | Xf   | A        |
| Neptunia lutea                    | Xf   | A        |
| Nerium oleander                   | Xf   | A        |
| Olea europaea                     | Xf   | A        |
| Olea europaea subsp. sylvestris   | Xf   | A        |
| Olea sp.                          | Xf   | A        |
| Parthenocissus quinquefolia       | Xf   | A        |
| Paspalum dilatatum                | Xf   | A        |
| Periwinkle (common name)          | Xf   | A        |
| Persea americana                  | Xf   | A        |
| Phoenix reclinata                 | Xf   | A        |
| Phoenix roebelenii                | Xf   | A        |
| Pinus taeda                       | Xf   | A        |
| Platanus occidentalis             | Xf   | A        |
| Platanus sp.                      | Xf   | A        |
| Polygala myrtifolia               | Xf   | A        |
| Prunus avium                      | Xf   | A        |
| Prunus cerasifera                 | Xf   | A        |
| Prunus cerasifera × P. munsoniana | Xf   | A        |
| Prunus dulcis                     | Xf   | A        |
| Prunus persica                    | Xf   | A        |
| Prunus salicina                   | Xf   | A        |
| Prunus sp.                        | Xf   | A        |
| Pyrus pyrifolia                   | Xf   | A        |
| Pyrus sp.                         | Xf   | A        |
| Quercus coccinea                  | Xf   | A        |
| Quercus falcata                   | Xf   | A        |
| Quercus laevis                    | Xf   | A        |
| Quercus laurifolia                | Xf   | A        |
| Quercus nigra                     | Xf   | A        |
| Quercus palustris                 | Xf   | A        |
| Quercus rubra                     | Xf   | A        |
| Quercus sp.                       | Xf   | A        |
| Quercus velutina                  | Xf   | A        |
| Quercus virginiana                | Xf   | A        |
| Ratibida columnifera              | Xf   | A        |
| Rhamnus alaternus                 | Xf   | A        |
| Rhus sp.                          | Xf   | A        |
| Rosmarinus officinalis            | Xf   | A        |
| Rubus hedycarpus subsp. procerus  | Xf   | A        |
| Rubus sp.                         | Xf   | A        |
| Sambucus canadensis               | Xf   | A        |
| Sassafras albidum                 | Xf   | A        |
| Sassafras sp.                     | Xf   | A        |
| Setaria magna                     | Xf   | A        |
| Solidago fistulosa                | Xf   | A        |
| Plant species         | Pest                      | Category |
|----------------------|---------------------------|----------|
| Spartium junceum     | Xf subsp. unknown         | A        |
| Stewartia pseudocamellia | Xf subsp. unknown     | A        |
| Symphyotrichum divaricatum | Xf subsp. unknown | A        |
| Teucrium capitatum   | Xf subsp. unknown         | A        |
| Trifolium repens     | Xf subsp. unknown         | A        |
| Ulmus americana      | Xf subsp. unknown         | A        |
| Ulmus glabra         | Xf subsp. unknown         | A        |
| Ulmus pumila         | Xf subsp. unknown         | A        |
| Ulmus sp.             | Xf subsp. unknown         | A        |
| Vaccinium ashei      | Xf subsp. unknown         | A        |
| Vaccinium corymbosum | Xf subsp. unknown         | A        |
| Vaccinium sp.        | Xf subsp. unknown         | A        |
| Vaccinium virgatum   | Xf subsp. unknown         | A        |
| Vinca minor          | Xf subsp. unknown         | A        |
| Vitis californica    | Xf subsp. unknown         | A        |
| Vitis candicans      | Xf subsp. unknown         | A        |
| Vitis labrusca       | Xf subsp. unknown         | A        |
| Vitis labrusca × V. vinifera | Xf subsp. unknown | A        |
| Vitis munsoniana     | Xf subsp. unknown         | A        |
| Vitis muscadina      | Xf subsp. unknown         | A        |
| Vitis rotundifolia   | Xf subsp. unknown         | A        |
| Vitis sp.            | Xf subsp. unknown         | A        |
| Vitis vinifera       | Xf subsp. unknown         | A        |
| Vitis vulpina        | Xf subsp. unknown         | A        |
| Acer saccharum       | Xf subsp. unknown         | B        |
| Cyperus eragrostis   | Xf subsp. unknown         | B        |
| Hevea brasiliensis   | Xf subsp. unknown         | B        |
| Prunus domestica     | Xf subsp. unknown         | B        |
| Sorghum halepense    | Xf subsp. unknown         | B        |
| Acacia longifolia    | Xf subsp. unknown         | C        |
| Acer macrophyllum    | Xf subsp. unknown         | C        |
| Acer negundo         | Xf subsp. unknown         | C        |
| Acer platanoides     | Xf subsp. unknown         | C        |
| Acer sp.             | Xf subsp. unknown         | C        |
| Aesculus × hybridia  | Xf subsp. unknown         | C        |
| Agathis australis    | Xf subsp. unknown         | C        |
| Agrostis gigantea    | Xf subsp. unknown         | C        |
| Alecryn excelsus     | Xf subsp. unknown         | C        |
| Alternanthera ficoidea | Xf subsp. unknown     | C        |
| Amaranthus sp.       | Xf subsp. unknown         | C        |
| Anisantha diandra    | Xf subsp. unknown         | C        |
| Anisantha rigida     | Xf subsp. unknown         | C        |
| Arctostaphylos sp.   | Xf subsp. unknown         | C        |
| Artemisia douglasiana| Xf subsp. unknown         | C        |
| Atriplex sp.         | Xf subsp. unknown         | C        |
| Avena fatua          | Xf subsp. unknown         | C        |
| Axonopus compressus  | Xf subsp. unknown         | C        |
| Baccharis pilularis   | Xf subsp. unknown         | C        |
| Bidens pilosa        | Xf subsp. unknown         | C        |
| Boerhavia diffusa    | Xf subsp. unknown         | C        |
| Plant species                     | Pest                  | Category |
|----------------------------------|-----------------------|----------|
| *Borreria latifolia*             | Xf subsp. unknown     | C        |
| *Brachiaria decumbens*          | Xf subsp. unknown     | C        |
| *Brachiaria plantaginea*         | Xf subsp. unknown     | C        |
| *Brachyglottis sp.*              | Xf subsp. unknown     | C        |
| *Bromus sp.*                     | Xf subsp. unknown     | C        |
| *Broussonetia papyrifera*        | Xf subsp. unknown     | C        |
| *Calicotome sp.*                 | Xf subsp. unknown     | C        |
| *Calicotome spinosa*             | Xf subsp. unknown     | C        |
| *Calyptocarpus bilaristatus*     | Xf subsp. unknown     | C        |
| *Campsis radicans*               | Xf subsp. unknown     | C        |
| *Capsella bursa-pastoris*        | Xf subsp. unknown     | C        |
| *Carex sp.*                      | Xf subsp. unknown     | C        |
| *Celastrus orbiculatus*          | Xf subsp. unknown     | C        |
| *Cenchrus echinatus*             | Xf subsp. unknown     | C        |
| *Chamaesyce hirta*               | Xf subsp. unknown     | C        |
| *Chenopodium murale*             | Xf subsp. unknown     | C        |
| *Chloris halophila*              | Xf subsp. unknown     | C        |
| *Cistus monspeliensis*           | Xf subsp. unknown     | C        |
| *Coffea arabica × C. canephora*  | Xf subsp. unknown     | C        |
| *Coffea arabica × C. eugenioides*| Xf subsp. unknown     | C        |
| *Coffea arabica × C. iberica var. dewevrei* | Xf subsp. unknown | C |
| *Coffea arabica × C. racemosa*   | Xf subsp. unknown     | C        |
| *Coffea canephora*               | Xf subsp. unknown     | C        |
| *Coffea racemosa*                | Xf subsp. unknown     | C        |
| *Coffea eugenioides*             | Xf subsp. unknown     | C        |
| *Coffea kapakata*                | Xf subsp. unknown     | C        |
| *Coffea liberica var. dewevrei*  | Xf subsp. unknown     | C        |
| *Coffea stenophylla*             | Xf subsp. unknown     | C        |
| *Commelina benghalensis*         | Xf subsp. unknown     | C        |
| *Commelina erecta*               | Xf subsp. unknown     | C        |
| *Corvolvulus arvensis*           | Xf subsp. unknown     | C        |
| *Coprosma repens*                | Xf subsp. unknown     | C        |
| *Coprosma robusta*               | Xf subsp. unknown     | C        |
| *Cordyline australis*            | Xf subsp. unknown     | C        |
| *Cordyline sp.*                  | Xf subsp. unknown     | C        |
| *Cornus florida*                 | Xf subsp. unknown     | C        |
| *Corokia cotoneaster*            | Xf subsp. unknown     | C        |
| *Corokia macrocarpa*             | Xf subsp. unknown     | C        |
| *Corokia sp.*                    | Xf subsp. unknown     | C        |
| *Corynocarpus laevigatus*        | Xf subsp. unknown     | C        |
| *Croton setigerus*               | Xf subsp. unknown     | C        |
| *Cynodon dactylon*               | Xf subsp. unknown     | C        |
| *Cyperus sp.*                    | Xf subsp. unknown     | C        |
| *Cytisus scoparius*              | Xf subsp. unknown     | C        |
| *Datura wrightii*                | Xf subsp. unknown     | C        |
| *Digitaria horizontalis*         | Xf subsp. unknown     | C        |
| *Digitaria insularis*            | Xf subsp. unknown     | C        |
| *Digitaria sanguinalis*          | Xf subsp. unknown     | C        |
| *Duranta erecta*                 | Xf subsp. unknown     | C        |
| *Dysphania ambrosioides*         | Xf subsp. unknown     | C        |
| Plant species                  | Pest | Category |
|-------------------------------|------|----------|
| Echinochloa crus-galli        | Xf   | C        |
| Eleusine indica               | Xf   | C        |
| Erigeron canadensis          | Xf   | C        |
| Eriochloa contracta          | Xf   | C        |
| Eriogonum sp.                | Xf   | C        |
| Erodium botrys               | Xf   | C        |
| Erodium moschatum            | Xf   | C        |
| Erodium sp.                  | Xf   | C        |
| Escallonia bifida            | Xf   | C        |
| Eucalyptus sp.               | Xf   | C        |
| Facelis retusa               | Xf   | C        |
| Fragaria vesca subsp. californica | Xf | C     |
| Fraxinus angustifolia         | Xf   | C        |
| Fraxinus dipetala            | Xf   | C        |
| Fuchsia magellanica          | Xf   | C        |
| Genista lucida               | Xf   | C        |
| Geranium dissectum           | Xf   | C        |
| Haloragis erecta             | Xf   | C        |
| Hebe sp.                     | Xf   | C        |
| Hedera helix                 | Xf   | C        |
| Heliotropium fruticosum      | Xf   | C        |
| Heliotropium indicum         | Xf   | C        |
| Heterotheca grandiflora      | Xf   | C        |
| Hordeum murinum              | Xf   | C        |
| Hydrangea paniculata         | Xf   | C        |
| Hypocharis brasiliensis      | Xf   | C        |
| Ipomoea fistulosa            | Xf   | C        |
| Juglans regia                | Xf   | C        |
| Lactuca serriola             | Xf   | C        |
| Leonurus sibiricus           | Xf   | C        |
| Lepidium auriculatum         | Xf   | C        |
| Lepidium didymum             | Xf   | C        |
| Ligustrum sinense            | Xf   | C        |
| Ligustrum virgincum          | Xf   | C        |
| Liriodendron tulipfera       | Xf   | C        |
| Lolium multiflorum           | Xf   | C        |
| Lolium perenne               | Xf   | C        |
| Ludwigia grandiflora         | Xf   | C        |
| Malva parviflora             | Xf   | C        |
| Marrubium vulgare            | Xf   | C        |
| Medicago polymorpha          | Xf   | C        |
| Melicopyrum ternata          | Xf   | C        |
| Melicytus ramiflorus         | Xf   | C        |
| Melilotus sp.                | Xf   | C        |
| Melissa officinalis          | Xf   | C        |
| Merremia macrocalyx          | Xf   | C        |
| Meryta sinclairii            | Xf   | C        |
| Metrosideros excelsa         | Xf   | C        |
| Metrosideros sp.             | Xf   | C        |
| Metrosideros kermadecensis   | Xf   | C        |

Update of the Xylella spp. host plant database – systematic literature search up to 30 June 2019
| Plant species          | Pest       | Category |
|-----------------------|------------|----------|
| Montiastrum lineare   | Xf subsp. unknown | C        |
| Myoporum laetum       | Xf subsp. unknown | C        |
| Origanum majorana     | Xf subsp. unknown | C        |
| Panicum acuminatum    | Xf subsp. unknown | C        |
| Parthenocissus tricuspidata | Xf subsp. unknown | C        |
| Paspalum urvillei     | Xf subsp. unknown | C        |
| Paspalum regnellii    | Xf subsp. unknown | C        |
| Passiflora foetida    | Xf subsp. unknown | C        |
| Pennisetum clandestinum | Xf subsp. unknown | C        |
| Persicaria lapathifolia | Xf subsp. unknown | C        |
| Persicaria maculosa   | Xf subsp. unknown | C        |
| Phalaris angusta      | Xf subsp. unknown | C        |
| Phoenix sp.           | Xf subsp. unknown | C        |
| Phormium colensoi     | Xf subsp. unknown | C        |
| Phormium tenax        | Xf subsp. unknown | C        |
| Pittosporum crassifolium | Xf subsp. unknown | C        |
| Pittosporum eugenioides | Xf subsp. unknown | C        |
| Pittosporum tenuifolium | Xf subsp. unknown | C        |
| Pittosporum umbellatum | Xf subsp. unknown | C        |
| Plantago lanceolata   | Xf subsp. unknown | C        |
| Pluchea odorata       | Xf subsp. unknown | C        |
| Poa annua             | Xf subsp. unknown | C        |
| Polygonum arenastrum  | Xf subsp. unknown | C        |
| Portulaca oleracea    | Xf subsp. unknown | C        |
| Prunus angustifolia   | Xf subsp. unknown | C        |
| Prunus laurocerasus   | Xf subsp. unknown | C        |
| Prunus serotina       | Xf subsp. unknown | C        |
| Prunus serrulata      | Xf subsp. unknown | C        |
| Prunus simonii × P. salicina × P. cerasifera × P. munsoniana | Xf subsp. unknown | C        |
| Quercus agrifolia     | Xf subsp. unknown | C        |
| Quercus alba          | Xf subsp. unknown | C        |
| Quercus ilex          | Xf subsp. unknown | C        |
| Quercus imbricaria    | Xf subsp. unknown | C        |
| Quercus incana        | Xf subsp. unknown | C        |
| Quercus macrocarpa    | Xf subsp. unknown | C        |
| Quercus phellos       | Xf subsp. unknown | C        |
| Ranunculus repens     | Xf subsp. unknown | C        |
| Rhus diversiloba      | Xf subsp. unknown | C        |
| Richardia sp.         | Xf subsp. unknown | C        |
| Rosa californica      | Xf subsp. unknown | C        |
| Rubus ursinus         | Xf subsp. unknown | C        |
| Rubus vitifolius      | Xf subsp. unknown | C        |
| Rumex crispus         | Xf subsp. unknown | C        |
| Salix sp.             | Xf subsp. unknown | C        |
| Salsola kali subsp. tragus | Xf subsp. unknown | C        |
| Sambucus cerulea      | Xf subsp. unknown | C        |
| Senecio grisebachii   | Xf subsp. unknown | C        |
| Senecio vulgaris      | Xf subsp. unknown | C        |
| Senna secundiflora    | Xf subsp. unknown | C        |
| Sida rhombifolia      | Xf subsp. unknown | C        |
| Plant species          | Pest                   | Category |
|------------------------|------------------------|----------|
| Silybum marianum       | Xf subsp. unknown      | C        |
| Sisymbrium irio        | Xf subsp. unknown      | C        |
| Solanum americanum     | Xf subsp. unknown      | C        |
| Sonchus oleraceus      | Xf subsp. unknown      | C        |
| Sonchus sp.            | Xf subsp. unknown      | C        |
| Sophora secundiflora   | Xf subsp. unknown      | C        |
| Stachys arvensis       | Xf subsp. unknown      | C        |
| Stellaria media        | Xf subsp. unknown      | C        |
| Syzygium paniculatum   | Xf subsp. unknown      | C        |
| Talinum paniculatum    | Xf subsp. unknown      | C        |
| Taraxacum officinale   | Xf subsp. unknown      | C        |
| Trifolium incarnatum   | Xf subsp. unknown      | C        |
| Urtica dioica subsp.   | Xf subsp. unknown      | C        |
| Urtica urens           | Xf subsp. unknown      | C        |
| Vaccinium elliottii    | Xf subsp. unknown      | C        |
| Verbena litoralis      | Xf subsp. unknown      | C        |
| Vernonia sp.           | Xf subsp. unknown      | C        |
| Veronica persica       | Xf subsp. unknown      | C        |
| Veronica sp.           | Xf subsp. unknown      | C        |
| Vicia ludoviciana      | Xf subsp. unknown      | C        |
| Vinca major            | Xf subsp. unknown      | C        |
| Vitex lucens           | Xf subsp. unknown      | C        |
| Vitis arizonica        | Xf subsp. unknown      | C        |
| Vitis girdiana         | Xf subsp. unknown      | C        |
| Wisteria frutescens    | Xf subsp. unknown      | C        |
| Xanthium spinosum      | Xf subsp. unknown      | C        |
| Citrus × limonia       | Xf subsp. unknown      | D        |
| Coffea liberica        | Xf subsp. unknown      | D        |
| Prunus americana       | Xf subsp. unknown      | D        |
| Prunus munsoniana      | Xf subsp. unknown      | D        |
| Prunus simonii         | Xf subsp. unknown      | D        |
| Solidago canadensis    | Xf subsp. unknown      | D        |
| Prunus armeniaca       | Xf subsp. unknown      | E        |
| Prunus hortulana       | Xf subsp. unknown      | E        |
| Prunus mexicana        | Xf subsp. unknown      | E        |
| Ulmus × hollandica     | Xf subsp. unknown      | E        |
| Vitis aestivalis       | Xf subsp. unknown      | E        |
| Vitis bourquiniana     | Xf subsp. unknown      | E        |
| Vitis cinerea          | Xf subsp. unknown      | E        |
| Vitis simpsonii        | Xf subsp. unknown      | E        |
| Vitis × champinii      | Xf subsp. unknown      | E        |
| Vitis rufofomentosa    | Xf subsp. unknown      | E        |
| Vitis shuttleworthii   | Xf subsp. unknown      | E        |

| Plant species          | Pest                   | Category |
|------------------------|------------------------|----------|
| Acer sp.               | Xf subsp. fastidiosa   | A        |
| Calicotome spinosa     | Xf subsp. fastidiosa   | A        |
| Cercis occidentalis    | Xf subsp. fastidiosa   | A        |
| Cistus monspeliensis   | Xf subsp. fastidiosa   | A        |
| Citrus sinensis        | Xf subsp. fastidiosa   | A        |
| Plant species       | Pest Category | Category |
|--------------------|---------------|----------|
| Coffea arabica     | Xf subsp. fastidiosa | A       |
| Erysimum hybrids   | Xf subsp. fastidiosa | A       |
| Genista lucida     | Xf subsp. fastidiosa | A       |
| Juglans regia      | Xf subsp. fastidiosa | A       |
| Lupinus aridorum   | Xf subsp. fastidiosa | A       |
| Magnolia grandiflora | Xf subsp. fastidiosa | A       |
| Medicago sativa    | Xf subsp. fastidiosa | A       |
| Metrosideros sp.   | Xf subsp. fastidiosa | A       |
| Morus sp.          | Xf subsp. fastidiosa | A       |
| Nerium oleander sp.| Xf subsp. fastidiosa | A       |
| Pluchea odorata    | Xf subsp. fastidiosa | A       |
| Polygala myrtifolia| Xf subsp. fastidiosa | A       |
| Prunus avium       | Xf subsp. fastidiosa | A       |
| Prunus dulcis      | Xf subsp. fastidios  | A       |
| Prunus persica     | Xf subsp. fastidiosa | A       |
| Prunus sp.         | Xf subsp. fastidiosa | A       |
| Rhamnus alaternus  | Xf subsp. fastidiosa | A       |
| Rosmarinus officinalis | Xf subsp. fastidiosa | A   |
| Rubus rigidus      | Xf subsp. fastidiosa | A       |
| Rubus ursinus      | Xf subsp. fastidiosa | A       |
| Sambucus canadensis| Xf subsp. fastidiosa | A       |
| Spartium junceum   | Xf subsp. fastidiosa | A       |
| Streptocarpus hybrids | Xf subsp. fastidiosa | A       |
| Ulmus americana    | Xf subsp. fastidiosa | A       |
| Vinca major        | Xf subsp. fastidiosa | A       |
| Vitis aestivalis   | Xf subsp. fastidiosa | A       |
| Vitis aestivalis hybrid | Xf subsp. fastidiosa | A       |
| Vitis californica  | Xf subsp. fastidiosa | A       |
| Vitis candsicans   | Xf subsp. fastidiosa | A       |
| Vitis cinerea var. helleri × V. vulpina | Xf subsp. fastidiosa | A       |
| Vitis giriana      | Xf subsp. fastidiosa | A       |
| Vitis rotundifolia | Xf subsp. fastidiosa | A       |
| Vitis sp.          | Xf subsp. fastidiosa | A       |
| Vitis vinifera     | Xf subsp. fastidiosa | A       |
| Ambrosia artemisiifolia | Xf subsp. fastidiosa | C       |
| Broussonetia papyrifera | Xf subsp. fastidiosa | C       |
| Quercus sp.        | Xf subsp. fastidiosa | C       |
| Ulmus sp.          | Xf subsp. fastidiosa | C       |
| Sambucus sp.       | Xf subsp. fastidiosa | E       |
| Coffea canephora   | Xf subsp. fastidiosa/sandyi | A       |
| Coffea arabica     | Xf subsp. fastidiosa/sandyi | A       |
| Morus alba         | Xf subsp. morus | A       |
| Morus rubra        | Xf subsp. morus | A       |
| Morus sp.          | Xf subsp. morus | A       |
| Nandina domestica  | Xf subsp. morus | A       |
| Acacia dealbata    | Xf subsp. multiplex | A       |
| Plant species                     | Pest             | Category |
|----------------------------------|------------------|----------|
| Acacia longifolia               | Xf subsp. multiplex | A        |
| Acacia saligna                  | Xf subsp. multiplex | A        |
| Acacia sp.                      | Xf subsp. multiplex | A        |
| Acer griseum                    | Xf subsp. multiplex | A        |
| Acer pseudoplatanus             | Xf subsp. multiplex | A        |
| Acer rubrum                      | Xf subsp. multiplex | A        |
| Alnus rhombifolia               | Xf subsp. multiplex | A        |
| Ambrosia psilostachya           | Xf subsp. multiplex | A        |
| Ambrosia trifida                | Xf subsp. multiplex | A        |
| Ambrosia trifida var. texana    | Xf subsp. multiplex | A        |
| Ampeloplosis cordata            | Xf subsp. multiplex | A        |
| Anthyllis hermanniae            | Xf subsp. multiplex | A        |
| Artemisia arborescens           | Xf subsp. multiplex | A        |
| Artemisia sp.                   | Xf subsp. multiplex | A        |
| Asparagus acutifolius           | Xf subsp. multiplex | A        |
| Baccharis halimifolia           | Xf subsp. multiplex | A        |
| Calicotome spinosa              | Xf subsp. multiplex | A        |
| Calicotome villosa              | Xf subsp. multiplex | A        |
| Carya illinoiensis              | Xf subsp. multiplex | A        |
| Carya sp.                       | Xf subsp. multiplex | A        |
| Celtis occidentalis             | Xf subsp. multiplex | A        |
| Cercis canadensis               | Xf subsp. multiplex | A        |
| Cercis occidentalis             | Xf subsp. multiplex | A        |
| Cercis siliquastrum             | Xf subsp. multiplex | A        |
| Chionanthus sp.                 | Xf subsp. multiplex | A        |
| Cistus creticus                 | Xf subsp. multiplex | A        |
| Cistus monspeliensis            | Xf subsp. multiplex | A        |
| Cistus salvifolius              | Xf subsp. multiplex | A        |
| Cistus sp.                      | Xf subsp. multiplex | A        |
| Convolvulus cneorum             | Xf subsp. multiplex | A        |
| Coprosma repens                 | Xf subsp. multiplex | A        |
| Coronilla valentina             | Xf subsp. multiplex | A        |
| Coronilla valentina subsp. glauca | Xf subsp. multiplex | A    |
| Cytisus scoparius               | Xf subsp. multiplex | A        |
| Cytisus sp.                     | Xf subsp. multiplex | A        |
| Cytisus spinosa                 | Xf subsp. multiplex | A        |
| Cytisus villosus                | Xf subsp. multiplex | A        |
| Dodonaea viscosa                | Xf subsp. multiplex | A        |
| Elaeagnus angustifolia          | Xf subsp. multiplex | A        |
| Encelia farinosa                | Xf subsp. multiplex | A        |
| Erigeron karvinskianus          | Xf subsp. multiplex | A        |
| Euryops chrysanthemoides        | Xf subsp. multiplex | A        |
| Euryops pectinatus              | Xf subsp. multiplex | A        |
| Fallopia japonica               | Xf subsp. multiplex | A        |
| Ficus carica                    | Xf subsp. multiplex | A        |
| Fraxinus americana              | Xf subsp. multiplex | A        |
| Fraxinus angustifolia           | Xf subsp. multiplex | A        |
| Fraxinus sp.                    | Xf subsp. multiplex | A        |
| Genista corsica                 | Xf subsp. multiplex | A        |
| Genista ephedroides             | Xf subsp. multiplex | A        |
| Plant species | Pest | Category |
|---------------|------|----------|
| Genista sp.   | Xf subsp. multiplex | A |
| Genista × spachiana | Xf subsp. multiplex | A |
| Ginkgo biloba | Xf subsp. multiplex | A |
| Gleditsia triacanthos | Xf subsp. multiplex | A |
| Grevillea juniperina | Xf subsp. multiplex | A |
| Hebe elliptica | Xf subsp. multiplex | A |
| Hebe sp. | Xf subsp. multiplex | A |
| Helianthus annuus | Xf subsp. multiplex | A |
| Helianthus sp. | Xf subsp. multiplex | A |
| Helichrysum italicum | Xf subsp. multiplex | A |
| Helichrysum sp. | Xf subsp. multiplex | A |
| Helichrysum stoechas | Xf subsp. multiplex | A |
| Ilex aquifolium | Xf subsp. multiplex | A |
| Iva annua | Xf subsp. multiplex | A |
| Koelreuteria bipinnata | Xf subsp. multiplex | A |
| Lagerstroemia indica | Xf subsp. multiplex | A |
| Lagerstroemia sp. | Xf subsp. multiplex | A |
| Laurus nobilis | Xf subsp. multiplex | A |
| Lavandula angustifolia | Xf subsp. multiplex | A |
| Lavandula dentata | Xf subsp. multiplex | A |
| Lavandula sp. | Xf subsp. multiplex | A |
| Lavandula stoechas | Xf subsp. multiplex | A |
| Lavandula × heterophylla | Xf subsp. multiplex | A |
| Lavandula × intermedia | Xf subsp. multiplex | A |
| Liquidambar styraciflua | Xf subsp. multiplex | A |
| Lonicera japonica | Xf subsp. multiplex | A |
| Lupinus villosus | Xf subsp. multiplex | A |
| Medicago arborea | Xf subsp. multiplex | A |
| Medicago sativa | Xf subsp. multiplex | A |
| Metrosideros excelsa | Xf subsp. multiplex | A |
| Myrtus communis | Xf subsp. multiplex | A |
| Olea europaea | Xf subsp. multiplex | A |
| Olea europaea subsp. sylvestris | Xf subsp. multiplex | A |
| Olea sp. | Xf subsp. multiplex | A |
| Osteospermum ecklonis | Xf subsp. multiplex | A |
| Pelargonium graveolens | Xf subsp. multiplex | A |
| Pelargonium sp. | Xf subsp. multiplex | A |
| Periwinkle (common name) | Xf subsp. multiplex | A |
| Phagnalon saxatile | Xf subsp. multiplex | A |
| Phlomis fruticosa | Xf subsp. multiplex | A |
| Pistacia vera | Xf subsp. multiplex | A |
| Platanus occidentalis | Xf subsp. multiplex | A |
| Polygala myrtifolia | Xf subsp. multiplex | A |
| Polygala × grandiflora nana | Xf subsp. multiplex | A |
| Prunus armeniaca | Xf subsp. multiplex | A |
| Prunus avium | Xf subsp. multiplex | A |
| Prunus cerasifera | Xf subsp. multiplex | A |
| Prunus cerasus | Xf subsp. multiplex | A |
| Prunus domestica | Xf subsp. multiplex | A |
| Prunus dulcis | Xf subsp. multiplex | A |
| Plant species | Pest | Category |
|---------------|------|----------|
| Prunus persica | Xf subsp. multiplex | A |
| Prunus salicina | Xf subsp. multiplex | A |
| Prunus sp. | Xf subsp. multiplex | A |
| Quercus coccinea | Xf subsp. multiplex | A |
| Quercus falcata | Xf subsp. multiplex | A |
| Quercus laevis | Xf subsp. multiplex | A |
| Quercus macrocarpa | Xf subsp. multiplex | A |
| Quercus nigra | Xf subsp. multiplex | A |
| Quercus palustris | Xf subsp. multiplex | A |
| Quercus phellos | Xf subsp. multiplex | A |
| Quercus robur | Xf subsp. multiplex | A |
| Quercus rubra | Xf subsp. multiplex | A |
| Quercus shumardii | Xf subsp. multiplex | A |
| Quercus sp. | Xf subsp. multiplex | A |
| Quercus suber | Xf subsp. multiplex | A |
| Ratibida columnifera | Xf subsp. multiplex | A |
| Rhamnus alaternus | Xf subsp. multiplex | A |
| Robinia pseudoacacia | Xf subsp. multiplex | A |
| Rosa canina | Xf subsp. multiplex | A |
| Rosa sp. | Xf subsp. multiplex | A |
| Rosmarinus officinalis | Xf subsp. multiplex | A |
| Rubus sp. | Xf subsp. multiplex | A |
| Salvia mellifera | Xf subsp. multiplex | A |
| Sambucus sp. | Xf subsp. multiplex | A |
| Santolina chamaecyparissus | Xf subsp. multiplex | A |
| Sapindus saponaria | Xf subsp. multiplex | A |
| Solidago virgaurea | Xf subsp. multiplex | A |
| Spartium junceum | Xf subsp. multiplex | A |
| Spartium sp. | Xf subsp. multiplex | A |
| Strelitzia reginae | Xf subsp. multiplex | A |
| Ulex europaeus | Xf subsp. multiplex | A |
| Ulex minor | Xf subsp. multiplex | A |
| Ulmus americana | Xf subsp. multiplex | A |
| Ulmus crassifolia | Xf subsp. multiplex | A |
| Vaccinium ashei | Xf subsp. multiplex | A |
| Vaccinium sp. | Xf subsp. multiplex | A |
| Vinca major | Xf subsp. multiplex | A |
| Vinca sp. | Xf subsp. multiplex | A |
| Westringia fruticosa | Xf subsp. multiplex | A |
| Xanthium strumarium | Xf subsp. multiplex | A |
| Acer platanoides | Xf subsp. multiplex | C |
| Cistus × incanus | Xf subsp. multiplex | C |
| Liriodendron tulipifera | Xf subsp. multiplex | C |
| Polygala sp. | Xf subsp. multiplex | C |
| Polygala × dalmisiana | Xf subsp. multiplex | C |
| Vaccinium corymbosum | Xf subsp. multiplex | E |

| Plant species | Pest | Category |
|---------------|------|----------|
| Acacia saligna | Xf subsp. pauca | A |
| Acacia sp. | Xf subsp. pauca | A |
| Plant species                  | Pest             | Category |
|-------------------------------|------------------|----------|
| Amaranthus retroflexus        | Xf subsp. pauca  | A        |
| Asparagus acutifolius         | Xf subsp. pauca  | A        |
| Catharanthus roseus           | Xf subsp. pauca  | A        |
| Chamaesyce canescens          | Xf subsp. pauca  | A        |
| Chenopodium album             | Xf subsp. pauca  | A        |
| Cistus creticus               | Xf subsp. pauca  | A        |
| Citrus sinensis               | Xf subsp. pauca  | A        |
| Citrus sp.                    | Xf subsp. pauca  | A        |
| Coffea arabica                | Xf subsp. pauca  | A        |
| Coffea sp.                    | Xf subsp. pauca  | A        |
| Dodonaea viscosa              | Xf subsp. pauca  | A        |
| Eremophila maculata           | Xf subsp. pauca  | A        |
| Erigeron bonariensis          | Xf subsp. pauca  | A        |
| Erigeron sp.                  | Xf subsp. pauca  | A        |
| Erigeron sumatrensis          | Xf subsp. pauca  | A        |
| Euphorbia terracina           | Xf subsp. pauca  | A        |
| Grevillea juniperina          | Xf subsp. pauca  | A        |
| Hebe sp.                      | Xf subsp. pauca  | A        |
| Heliotropium europaeum        | Xf subsp. pauca  | A        |
| Hibiscus rosa-sinensis        | Xf subsp. pauca  | A        |
| Laurus nobilis                | Xf subsp. pauca  | A        |
| Lavandula angustifolia        | Xf subsp. pauca  | A        |
| Lavandula dentata             | Xf subsp. pauca  | A        |
| Lavandula stoechas            | Xf subsp. pauca  | A        |
| Myoporum insulare             | Xf subsp. pauca  | A        |
| Myrtus communis               | Xf subsp. pauca  | A        |
| Nerium oleander               | Xf subsp. pauca  | A        |
| Olea europaea                 | Xf subsp. pauca  | A        |
| Olea europaea subsp. sylvestris| Xf subsp. pauca  | A        |
| Osteospermum fruticosum       | Xf subsp. pauca  | A        |
| Pelargonium fragrans          | Xf subsp. pauca  | A        |
| Periwinkle (common name)      | Xf subsp. pauca  | A        |
| Phillyrea latifolia            | Xf subsp. pauca  | A        |
| Polygala myrtifolia           | Xf subsp. pauca  | A        |
| Prunus avium                  | Xf subsp. pauca  | A        |
| Prunus domestica              | Xf subsp. pauca  | A        |
| Prunus dulcis                 | Xf subsp. pauca  | A        |
| Rhamnus alaternus             | Xf subsp. pauca  | A        |
| Rosmarinus officinalis        | Xf subsp. pauca  | A        |
| Spartium junceum              | Xf subsp. pauca  | A        |
| Vinca minor                   | Xf subsp. pauca  | A        |
| Westringia fruticosa          | Xf subsp. pauca  | A        |
| Westringia glabra             | Xf subsp. pauca  | A        |
| Prunus persica                | Xf subsp. pauca  | C        |
| Quercus ilex                  | Xf subsp. pauca  | C        |

| Plant species                  | Pest             | Category |
|-------------------------------|------------------|----------|
| Coffea sp.                    | Xf subsp. sandyi | A        |
| Hemerocallis sp.              | Xf subsp. sandyi | A        |
| Jacaranda mimosifolia         | Xf subsp. sandyi | A        |
| Plant species               | Pest                | Category |
|----------------------------|---------------------|----------|
| *Magnolia grandiiflora*    | *Xf* subsp. *sandyi*| A        |
| *Nandina domestica*        | *Xf* subsp. *sandyi*| A        |
| *Nerium oleander*          | *Xf* subsp. *sandyi*| A        |
| *Polygala myrtifolia*      | *Xf* subsp. *sandyi*| C        |
| **Plant species**          | **Pest**            | **Category** |
| *Chitalpa tashkentensis*   | *Xf* subsp. *tashke*| A        |
| *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 2.5.2):

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 culture) or positive with one method (between: sequencing, culture).

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 culture) or positive with one method (between: sequencing, culture).

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 culture).

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 culture).

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, culturing).

| Plant species           | Pest     | Category |
|------------------------|----------|----------|
| Acer macrophyllum      | Xf subsp. unknown | A        |
| Acer negundo           | Xf subsp. unknown | A        |
| Aesculus californica   | Xf subsp. unknown | A        |
| Alnus rhombifolia      | Xf subsp. unknown | A        |
| Ambrosia artemisiifolia| Xf subsp. unknown | A        |
| Ambrosia sp.           | Xf subsp. unknown | A        |
| Arabidopsis thaliana   | Xf subsp. unknown | A        |
| Artemisia douglasiana  | Xf subsp. unknown | A        |
| Baccharis pilularis    | Xf subsp. unknown | A        |
| Baccharis salicifolia  | Xf subsp. unknown | A        |
| Brassica nigra         | Xf subsp. unknown | A        |
| Carya illinoensis      | Xf subsp. unknown | A        |
| Catharanthus roseus    | Xf subsp. unknown | A        |
| Citrus aurantiifolia   | Xf subsp. unknown | A        |
| Citrus clementina      | Xf subsp. unknown | A        |
| Citrus clementina × C. sinensis | Xf subsp. unknown | A        |
| Citrus jambhiri        | Xf subsp. unknown | A        |
| Citrus reshni          | Xf subsp. unknown | A        |
| Citrus reticulata      | Xf subsp. unknown | A        |
| Citrus sinensis        | Xf subsp. unknown | A        |
| Citrus sp.             | Xf subsp. unknown | A        |
| Citrus sunki           | Xf subsp. unknown | A        |
| Citrus unshiu          | Xf subsp. unknown | A        |
| Citrus × limonia       | Xf subsp. unknown | A        |
| Citrus × nobilis       | Xf subsp. unknown | A        |
| Coffea arabica         | Xf subsp. unknown | A        |
| Coffea sp.             | Xf subsp. unknown | A        |
| Conium maculatum       | Xf subsp. unknown | A        |
| Coprosma repens        | Xf subsp. unknown | A        |
| Plant species          | Pest | Category |
|------------------------|------|----------|
| Coriandrum sativum     | Xf   | subsp. unknown | A |
| Cyperus eragrostis     | Xf   | subsp. unknown | A |
| Echinochloa crus-galli | Xf   | subsp. unknown | A |
| Fagopyrum esculentum   | Xf   | subsp. unknown | A |
| Fraxinus latifolia     | Xf   | subsp. unknown | A |
| Hakea petiolaris       | Xf   | subsp. unknown | A |
| Hedera helix           | Xf   | subsp. unknown | A |
| Lobularia maritima     | Xf   | subsp. unknown | A |
| Medicago sativa        | Xf   | subsp. unknown | A |
| Morus alba             | Xf   | subsp. unknown | A |
| Morus sp.              | Xf   | subsp. unknown | A |
| Nerium oleander        | Xf   | subsp. unknown | A |
| Nicotiana benthamiana  | Xf   | subsp. unknown | A |
| Nicotiana tabacum      | Xf   | subsp. unknown | A |
| Parthenocissus quinquefolia | Xf | subsp. unknown | A |
| Periwinkle (common name) | Xf | subsp. unknown | A |
| Persea americana       | Xf   | subsp. unknown | A |
| Platanus occidentalis  | Xf   | subsp. unknown | A |
| Populus fremontii      | Xf   | subsp. unknown | A |
| Prunus cerasifera      | Xf   | subsp. unknown | A |
| Prunus dulcis          | Xf   | subsp. unknown | A |
| Prunus persica         | Xf   | subsp. unknown | A |
| Prunus salicina        | Xf   | subsp. unknown | A |
| Prunus sp.             | Xf   | subsp. unknown | A |
| Pyrus pyrifolia        | Xf   | subsp. unknown | A |
| Quercus agrifolia      | Xf   | subsp. unknown | A |
| Quercus lobata         | Xf   | subsp. unknown | A |
| Quercus rubra          | Xf   | subsp. unknown | A |
| Rhus diversiloba       | Xf   | subsp. unknown | A |
| Rosa californica       | Xf   | subsp. unknown | A |
| Rubus hedycarpus subsp. procerus | Xf | subsp. unknown | A |
| Rubus rigidus          | Xf   | subsp. unknown | A |
| Rubus ursinus          | Xf   | subsp. unknown | A |
| Salix laevigata        | Xf   | subsp. unknown | A |
| Salix lasiolepis       | Xf   | subsp. unknown | A |
| Salvia apiana          | Xf   | subsp. unknown | A |
| Salvia melifera        | Xf   | subsp. unknown | A |
| Sambucus canadensis    | Xf   | subsp. unknown | A |
| Sambucus sp.           | Xf   | subsp. unknown | A |
| Spartium junceum       | Xf   | subsp. unknown | A |
| Swainsona galegifolia  | Xf   | subsp. unknown | A |
| Symphoricarpos albus   | Xf   | subsp. unknown | A |
| Teline monspessulana   | Xf   | subsp. unknown | A |
| Ulmus americana        | Xf   | subsp. unknown | A |
| Umbellularia californica | Xf | subsp. unknown | A |
| Urtica dioica          | Xf   | subsp. unknown | A |
| Vaccinium corymbosum   | Xf   | subsp. unknown | A |
| Vaccinium sp.          | Xf   | subsp. unknown | A |
| Vicia sativa           | Xf   | subsp. unknown | A |
| Vinca major            | Xf   | subsp. unknown | A |
| Plant species                  | Pest       | Category |
|-------------------------------|------------|----------|
| Vinca minor                   | Xf subsp. unknown | A        |
| Vitis arizonica × V. rupestris| Xf subsp. unknown | A        |
| Vitis arizonica/candicans × V. rupestris | Xf subsp. unknown | A        |
| Vitis californica             | Xf subsp. unknown | A        |
| Vitis labrusca × V. vinifera  | Xf subsp. unknown | A        |
| Vitis rotundifolia            | Xf subsp. unknown | A        |
| Vitis rotundifolia × V. rupestris | Xf subsp. unknown | A        |
| Vitis rupestris               | Xf subsp. unknown | A        |
| Vitis sp.                     | Xf subsp. unknown | A        |
| Vitis vinifera                | Xf subsp. unknown | A        |
| Morus rubra                   | Xf subsp. unknown | B        |
| Prunus domestica              | Xf subsp. unknown | B        |
| Vitis arizonica/candicans     | Xf subsp. unknown | B        |
| Vitis aestivalis var. smalliana | Xf subsp. unknown | B        |
| Vitis rufotomentosa           | Xf subsp. unknown | B        |
| Ambrosia acanthicarpa         | Xf subsp. unknown | C        |
| Ambrosia trifida var. texana  | Xf subsp. unknown | C        |
| Amsinckia douglasiana         | Xf subsp. unknown | C        |
| Anisantha rigida              | Xf subsp. unknown | C        |
| Avena fatua                   | Xf subsp. unknown | C        |
| Brachiaria plantaginea        | Xf subsp. unknown | C        |
| Bromus sp.                    | Xf subsp. unknown | C        |
| Callistephus chinensis        | Xf subsp. unknown | C        |
| Canna sp.                     | Xf subsp. unknown | C        |
| Ceratochloa cathartica        | Xf subsp. unknown | C        |
| Citrus deliciosa × C. sinensis | Xf subsp. unknown | C        |
| Citrus medica                 | Xf subsp. unknown | C        |
| Citrus tangerina              | Xf subsp. unknown | C        |
| Citrus × tangelo              | Xf subsp. unknown | C        |
| Clarkia amoena subsp. lindleyi | Xf subsp. unknown | C        |
| Coprosma baueri               | Xf subsp. unknown | C        |
| Cotoneaster rotundifolius     | Xf subsp. unknown | C        |
| Cynodon dactylon              | Xf subsp. unknown | C        |
| Cyperus esculentus            | Xf subsp. unknown | C        |
| Cytisus scoparius             | Xf subsp. unknown | C        |
| Daucus carota subsp. sativus   | Xf subsp. unknown | C        |
| Digitaria sanguinalis         | Xf subsp. unknown | C        |
| Dysphania ambrosioides        | Xf subsp. unknown | C        |
| Epilobium brachycarpum        | Xf subsp. unknown | C        |
| Epilobium ciliatum            | Xf subsp. unknown | C        |
| Eragrostis diffusa            | Xf subsp. unknown | C        |
| Erodium cicutarium            | Xf subsp. unknown | C        |
| Fallopia convolvulus          | Xf subsp. unknown | C        |
| Grevillea alpina              | Xf subsp. unknown | C        |
| Helianthus annuus             | Xf subsp. unknown | C        |
| Hordeum murinum               | Xf subsp. unknown | C        |
| Hordeum vulgare               | Xf subsp. unknown | C        |
| Iva annua                     | Xf subsp. unknown | C        |
| Lactuca serriola              | Xf subsp. unknown | C        |
| Lathyrus cicera               | Xf subsp. unknown | C        |
| Plant species                      | Pest       | Category |
|-----------------------------------|------------|----------|
| Lathyrus clymenum                 | Xf subsp. unknown | C        |
| Lathyrus sativus                  | Xf subsp. unknown | C        |
| Leptospermum laevisatum           | Xf subsp. unknown | C        |
| Lolium multiflorum                | Xf subsp. unknown | C        |
| Lolium temulentum                 | Xf subsp. unknown | C        |
| Lonicera japonica                 | Xf subsp. unknown | C        |
| Melilotus albus                   | Xf subsp. unknown | C        |
| Melilotus albus var. annuus       | Xf subsp. unknown | C        |
| Melilotus officinalis             | Xf subsp. unknown | C        |
| Mentha sp.                        | Xf subsp. unknown | C        |
| Oenanthe sarmentosa               | Xf subsp. unknown | C        |
| Oenothera elata                   | Xf subsp. unknown | C        |
| Olea europaea                     | Xf subsp. unknown | C        |
| Parthenocissus tricuspidata       | Xf subsp. unknown | C        |
| Paspalum dilatatum                | Xf subsp. unknown | C        |
| Pelargonium × hortorum            | Xf subsp. unknown | C        |
| Pennisetum clandestinum           | Xf subsp. unknown | C        |
| Pennisetum glaucum                | Xf subsp. unknown | C        |
| Persicaria maculosa               | Xf subsp. unknown | C        |
| Phalaris minor                    | Xf subsp. unknown | C        |
| Phalaris paradoxa                 | Xf subsp. unknown | C        |
| Phleum pratense                   | Xf subsp. unknown | C        |
| Photinia arbutifolia              | Xf subsp. unknown | C        |
| Pittosporum crassifolium          | Xf subsp. unknown | C        |
| Platanus sp.                      | Xf subsp. unknown | C        |
| Poa annua                         | Xf subsp. unknown | C        |
| Poncirus trifoliata               | Xf subsp. unknown | C        |
| Reseda odorata                    | Xf subsp. unknown | C        |
| Rheum rhabonticum                 | Xf subsp. unknown | C        |
| Rubus vitifolius                  | Xf subsp. unknown | C        |
| Rumex crispus                     | Xf subsp. unknown | C        |
| Sambucus cerulea                  | Xf subsp. unknown | C        |
| Sonchus asper                      | Xf subsp. unknown | C        |
| Sorghum halepense                 | Xf subsp. unknown | C        |
| Sorghum × drummondii              | Xf subsp. unknown | C        |
| Syringa vulgaris                  | Xf subsp. unknown | C        |
| Syzygium paniculatum              | Xf subsp. unknown | C        |
| Trifolium fragiferum              | Xf subsp. unknown | C        |
| Trifolium hybridum                | Xf subsp. unknown | C        |
| Trifolium incarnatum              | Xf subsp. unknown | C        |
| Trifolium pratense                | Xf subsp. unknown | C        |
| Trifolium repens                  | Xf subsp. unknown | C        |
| Trifolium repens var. latum       | Xf subsp. unknown | C        |
| Urtica dioica subsp. gracilis     | Xf subsp. unknown | C        |
| Vicia monantha                    | Xf subsp. unknown | C        |
| Vitis acerifolia                  | Xf subsp. unknown | C        |
| Vitis aestivalis                  | Xf subsp. unknown | C        |
| Vitis arizonica                   | Xf subsp. unknown | C        |
| Vitis arizonica hybrid            | Xf subsp. unknown | C        |
### Plant species

| Plant species | Pest Category |
|---------------|---------------|
| Vitis arizonica/girdiana | Xf subsp. unknown |
| Vitis arizonica/girdiana × V. rupestris | Xf subsp. unknown |
| Vitis berlandieri | Xf subsp. unknown |
| Vitis candicans | Xf subsp. unknown |
| Vitis cinerea | Xf subsp. unknown |
| Vitis cinerea × V. berlandieri | Xf subsp. unknown |
| Vitis girdiana | Xf subsp. unknown |
| Vitis labrusca | Xf subsp. unknown |
| Vitis linceumii | Xf subsp. unknown |
| Vitis monticola | Xf subsp. unknown |
| Vitis munsoniana | Xf subsp. unknown |
| Vitis palmata | Xf subsp. unknown |
| Vitis simpsonii | Xf subsp. unknown |
| Vitis tiilaefolia | Xf subsp. unknown |
| Vitis vulpinia | Xf subsp. unknown |
| Vitis × champinii | Xf subsp. unknown |
| Vitis aestivalis var. smalliana × V. simpsonii | Xf subsp. unknown |
| Vitis bloodwothiana | Xf subsp. unknown |
| Vitis nesbittiana | Xf subsp. unknown |
| Vitis shuttleworthii | Xf subsp. unknown |
| Vulpia myuros | Xf subsp. unknown |
| Xanthium orientale | Xf subsp. unknown |
| (Prunus salicina × P. angustifolia) × (P. salicina × P. munsoniana) | Xf subsp. unknown |
| Prunus angustifolia | Xf subsp. unknown |
| Prunus avium | Xf subsp. unknown |
| Prunus cerasifera × P. salicina | Xf subsp. unknown |
| Prunus salicina × (P. salicina × P. cerasifera) | Xf subsp. unknown |
| Vitis arizonica × V. vinifera | Xf subsp. unknown |
| Chenopodium quinoa | Xf subsp. unknown |
| Citroncirus webberi | Xf subsp. unknown |
| Citrus macrophylla | Xf subsp. unknown |
| Nicotiana clevelandii | Xf subsp. unknown |
| Prunus armeniaca | Xf subsp. unknown |
| Prunus hortulana | Xf subsp. unknown |
| Prunus mexicana | Xf subsp. unknown |
| Prunus mume | Xf subsp. unknown |
| Amaranthus blitoides | Xf subsp. fastidiosa |
| Ambrosia cantharica | Xf subsp. fastidiosa |
| Ambrosia artemisiifolia | Xf subsp. fastidiosa |
| Catharanthus roseus | Xf subsp. fastidiosa |
| Chenopodium quinoa | Xf subsp. fastidiosa |
| Conium maculatum | Xf subsp. fastidiosa |
| Convolvulus arvensis | Xf subsp. fastidiosa |
| Cyperus esculentus | Xf subsp. fastidiosa |
| Datura wrightii | Xf subsp. fastidiosa |
| Echinochloa crus-galli | Xf subsp. fastidiosa |
| Erigeron canadensis | Xf subsp. fastidiosa |
| Eriochloa gracilis | Xf subsp. fastidiosa |
### Plant species

| Plant species                  | Pest                | Category |
|-------------------------------|---------------------|----------|
| Erodium moschatum             | Xf subsp. fastidiosa| A        |
| Eucalyptus camaldulensis      | Xf subsp. fastidiosa| A        |
| Eucalyptus globulus           | Xf subsp. fastidiosa| A        |
| Helianthus annuus             | Xf subsp. fastidiosa| A        |
| Ipomoea purpurea              | Xf subsp. fastidiosa| A        |
| Lactuca serriola              | Xf subsp. fastidiosa| A        |
| Malva parviflora              | Xf subsp. fastidiosa| A        |
| Medicago sativa               | Xf subsp. fastidiosa| A        |
| Nicotiana glauca              | Xf subsp. fastidiosa| A        |
| Nicotiana tabacum             | Xf subsp. fastidiosa| A        |
| Portulaca oleracea            | Xf subsp. fastidiosa| A        |
| Prunus dulcis                 | Xf subsp. fastidiosa| A        |
| Prunus sp.                    | Xf subsp. fastidiosa| A        |
| Rubus ursinus                 | Xf subsp. fastidiosa| A        |
| Rumex crispus                 | Xf subsp. fastidiosa| A        |
| Simmondsia chinensis          | Xf subsp. fastidiosa| A        |
| Solanum lycopersicum          | Xf subsp. fastidiosa| A        |
| Solanum melongena             | Xf subsp. fastidiosa| A        |
| Sonchus oleraceus             | Xf subsp. fastidiosa| A        |
| Sorghum halepense             | Xf subsp. fastidiosa| A        |
| Vicia faba                    | Xf subsp. fastidiosa| A        |
| Vicia sativa                  | Xf subsp. fastidiosa| A        |
| Vitis sp.                     | Xf subsp. fastidiosa| A        |
| Vitis vinifera                | Xf subsp. fastidiosa| A        |
| Xanthium strumarium           | Xf subsp. fastidiosa| A        |
| Arabidopsis thaliana          | Xf subsp. fastidiosa| B        |
| Dendranthema × grandiflorum   | Xf subsp. fastidiosa| C        |
| Olea europaea                 | Xf subsp. fastidiosa| C        |
| Prunus dulcis × P. webbii     | Xf subsp. fastidiosa| C        |
| Prunus persica                | Xf subsp. fastidiosa| C        |
| Prunus persica × P. webbii    | Xf subsp. fastidiosa| C        |
| Prunus webbii                 | Xf subsp. fastidiosa| C        |
| Rubus rigidus                 | Xf subsp. fastidiosa| C        |
| Sambucus canadensis           | Xf subsp. fastidiosa| C        |
| Vaccinium corymbosum          | Xf subsp. fastidiosa| C        |
| Vinca major                   | Xf subsp. fastidiosa| C        |
| Vitis arizonica/candicans    | Xf subsp. fastidiosa| C        |
| Vitis californica             | Xf subsp. fastidiosa| C        |
| Liquidambar styraciflua       | Xf subsp. fastidiosa| E        |
| Vaccinium sp.                 | Xf subsp. fastidiosa| E        |
| Vitis champinii × (V. solonis × V. othello) | Xf subsp. fastidiosa| E        |

### Plant species

| Plant species                  | Pest                | Category |
|-------------------------------|---------------------|----------|
| Morus alba                    | Xf subsp. morus     | A        |
| Nerium oleander               | Xf subsp. morus     | A        |

### Plant species

| Plant species                  | Pest                | Category |
|-------------------------------|---------------------|----------|
| Acer rubrum                   | Xf subsp. multiplex | A        |
| Ambrosia artemisiifolia       | Xf subsp. multiplex | A        |
| Carya illinoinsensis          | Xf subsp. multiplex | A        |
| Liquidambar styraciflua       | Xf subsp. multiplex | A        |
| Plant species                  | Pest           | Category |
|-------------------------------|----------------|----------|
| *Medicago sativa*             | Xf subsp. multiplex | A        |
| *Nicotiana tabacum*           | Xf subsp. multiplex | A        |
| *Olea europaea*               | Xf subsp. multiplex | A        |
| *Pistacia vera*               | Xf subsp. multiplex | A        |
| *Platanus occidentalis*       | Xf subsp. multiplex | A        |
| *Polygala myrtifolia*         | Xf subsp. multiplex | A        |
| *Prunus cerasifera*           | Xf subsp. multiplex | A        |
| *Prunus dulcis*               | Xf subsp. multiplex | A        |
| *Prunus persica*              | Xf subsp. multiplex | A        |
| *Prunus sp.*                  | Xf subsp. multiplex | A        |
| *Quercus falcata*             | Xf subsp. multiplex | A        |
| *Rubus fruticosus*            | Xf subsp. multiplex | A        |
| *Rubus ursinus*               | Xf subsp. multiplex | A        |
| *Vitis vinifera*              | Xf subsp. multiplex | A        |
| *Catharanthus roseus*         | Xf subsp. multiplex | A        |
| *Prunus persica × P. webbii*  | Xf subsp. multiplex | C        |
| *Prunus webbii*               | Xf subsp. multiplex | C        |
| *Vaccinium corymbosum*        | Xf subsp. multiplex | C        |
| *Vaccinium sp.*               | Xf subsp. multiplex | E        |

| Plant species                  | Pest           | Category |
|-------------------------------|----------------|----------|
| *Brachiaria decumbens*        | Xf subsp. pauca | A        |
| *Brachiaria plantaginea*      | Xf subsp. pauca | A        |
| *Catharanthus roseus*         | Xf subsp. pauca | A        |
| *Citrus reticulata*           | Xf subsp. pauca | A        |
| *Citrus sinensis*             | Xf subsp. pauca | A        |
| *Citrus sp.*                  | Xf subsp. pauca | A        |
| *Citrus × nobilis*            | Xf subsp. pauca | A        |
| *Coffea arabica*              | Xf subsp. pauca | A        |
| *Coffea sp.*                  | Xf subsp. pauca | A        |
| *Echinochloa crus-galli*      | Xf subsp. pauca | A        |
| *Nerium oleander*             | Xf subsp. pauca | A        |
| *Nicotiana clevelandii*       | Xf subsp. pauca | A        |
| *Nicotiana tabacum*           | Xf subsp. pauca | A        |
| *Olea europaea*               | Xf subsp. pauca | A        |
| *Polygala myrtifolia*         | Xf subsp. pauca | A        |
| *Arabidopsis thaliana*        | Xf subsp. pauca | B        |
| *Bidens pilosa*               | Xf subsp. pauca | C        |
| *Chenopodium album*           | Xf subsp. pauca | C        |
| *Digitaria horizontalis*      | Xf subsp. pauca | C        |
| *Medicago sativa*             | Xf subsp. pauca | C        |
| *Periwinkle (common name)*    | Xf subsp. pauca | C        |
| *Prunus avium*                | Xf subsp. pauca | C        |
| *Prunus dulcis*               | Xf subsp. pauca | C        |
| *Solanum americanum*          | Xf subsp. pauca | C        |

| Plant species                  | Pest           | Category |
|-------------------------------|----------------|----------|
| *Catharanthus roseus*         | Xf subsp. sandyi | A        |
| *Medicago sativa*             | Xf subsp. sandyi | A        |
| *Nerium oleander*             | Xf subsp. sandyi | A        |
| *Prunus dulcis*               | Xf subsp. sandyi | A        |
### Plant species

| Plant species | Pest       | Category |
|---------------|------------|----------|
| Vinca major   | Xf subsp. sandyi | A        |
| Nicotiana tabacum | Xf subsp. sandyi | C        |
| Nicotiana benthamiana | Xf subsp. tashke | C        |
Appendix C – Host plant species infected in unspecified conditions

List of host plant species, infected in unspecified conditions, of *X. fastidiosa* subsp. unknown (i.e. not reported in the publication), subsp. *fastidiosa*, subsp. *multiplex*, subsp. *pauca* and subsp. *sandyi* according to categories A, B, C, D, E (as reported in Section 2.5.2):

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 culture) or positive with one method (between: sequencing, culture).

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 culture) or positive with one method (between: sequencing, culture).

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 culture).

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 culture).

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, culturing).

| Plant species | Pest       | Category |
|---------------|------------|----------|
| *Ampelopsis arborea* | *Xf* subsp. unknown | A        |
| *Catharanthus roseus* | *Xf* subsp. unknown | A        |
| *Catharanthus sp.* | *Xf* subsp. unknown | A        |
| *Citrus jamhiri* | *Xf* subsp. unknown | A        |
| *Citrus sinensis* | *Xf* subsp. unknown | A        |
| *Coffea arabica* | *Xf* subsp. unknown | A        |
| *Hibiscus schizopetalus* | *Xf* subsp. unknown | A        |
| *Morus nigra* | *Xf* subsp. unknown | A        |
| *Nerium oleander* | *Xf* subsp. unknown | A        |
| *Prunus persica* | *Xf* subsp. unknown | A        |
| *Prunus sp.* | *Xf* subsp. unknown | A        |
| *Sambucus canadensis* | *Xf* subsp. unknown | A        |
| *Vitis munsoniana* | *Xf* subsp. unknown | A        |
| *Vitis rotundifolia* | *Xf* subsp. unknown | A        |
| *Vitis sp.* | *Xf* subsp. unknown | A        |
| *Vitis vinifera* | *Xf* subsp. unknown | A        |
| *Ambrosia sp.* | *Xf* subsp. unknown | B        |
| *Periwinkle (common name)* | *Xf* subsp. unknown | B        |
| *Acer sp.* | *Xf* subsp. unknown | C        |
| *Carya illinoinensis* | *Xf* subsp. unknown | C        |
| *Citrus sp.* | *Xf* subsp. unknown | C        |
| *Prunus dulcis* | *Xf* subsp. unknown | C        |
| *Prunus salicina* | *Xf* subsp. unknown | C        |
| *Pyrus sp.* | *Xf* subsp. unknown | C        |
| *Teline monspessulana* | *Xf* subsp. unknown | C        |
| *Vaccinium darrowii* | *Xf* subsp. unknown | C        |
| *Vaccinium sp.* | *Xf* subsp. unknown | C        |
| *Prunus angustifolia* | *Xf* subsp. unknown | D        |
| *Vitis labrusca* | *Xf* subsp. unknown | D        |
| Plant species | Pest          | Category |
|---------------|--------------|----------|
| Morus sp.     | Xf subsp. unknown | E        |
| Nicotiana tabacum | Xf subsp. unknown | E        |
| Ambrosia artemisiifolia | Xf subsp. fastidiosa | A        |
| Lupinus sp.   | Xf subsp. fastidiosa | A        |
| Prunus dulcis | Xf subsp. fastidiosa | A        |
| Sambucus sp.  | Xf subsp. fastidiosa | A        |
| Vitis rotundifolia | Xf subsp. fastidiosa | A        |
| Vitis sp.     | Xf subsp. fastidiosa | A        |
| Vitis vinifera | Xf subsp. fastidiosa | A        |
| Ambrosia trifida | Xf subsp. multiplex | A        |
| Morus sp.     | Xf subsp. multiplex | A        |
| Platanus sp.  | Xf subsp. multiplex | A        |
| Prunus cerasifera | Xf subsp. multiplex | A        |
| Prunus domestica | Xf subsp. multiplex | A        |
| Prunus dulcis | Xf subsp. multiplex | A        |
| Prunus salicina | Xf subsp. multiplex | A        |
| Quercus sp.   | Xf subsp. multiplex | A        |
| Rubus fruticosus | Xf subsp. multiplex | A        |
| Rubus sp.     | Xf subsp. multiplex | A        |
| Vaccinium corymbosum | Xf subsp. multiplex | A        |
| Vaccinium corymbosum × V. angustifolium hybrid | Xf subsp. multiplex | A        |
| Vinca sp.     | Xf subsp. multiplex | A        |
| Liquidambar styraciflua | Xf subsp. multiplex | C        |
| Quercus laevis | Xf subsp. multiplex | C        |
| Quercus rubra | Xf subsp. multiplex | C        |
| Citrus sinensis | Xf subsp. pauca | A        |
| Citrus sp.    | Xf subsp. pauca | A        |
| Coffea sp.    | Xf subsp. pauca | A        |
| Hibiscus fragilis | Xf subsp. pauca | A        |
| Hibiscus sp.  | Xf subsp. pauca | A        |
| Nerium oleander | Xf subsp. pauca | A        |
| Prunus domestica | Xf subsp. pauca | A        |
| Prunus sp.    | Xf subsp. pauca | A        |
| Coffea arabica | Xf subsp. sandyi | A        |
| 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 unspecified 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).

| *X. fastidiosa* subspecies/sequence type | Natural infection | Artificial infection | Unspecified infection | Grand Total |
|-----------------------------------------|-------------------|---------------------|----------------------|-------------|
|                                         | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |            |
| *fastidiosa*                            |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 242        |
| ST1                                     |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 199        |
| Acer sp.                                |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Amaranthus blitoides                    |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Ambrosia acachantipes                   |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 2          |
| Calicotome spinosa                      |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Catharanthus roseus                     |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 2          |
| Cercis occidentalis                     |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Chenopodium quinoa                      |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 2          |
| Cistus monspeliensis                    |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Citrus sinensis                         |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Conium maculatum                        |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 2          |
| Convolvulus arvensis                    |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 2          |
| Cypreus esculentus                      |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Datura wrightii                          |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Echinoclloa crus-galli                  |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Erigeron canadensis                     |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Erichloa gracilis                      |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Erodium moschatum                       |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 2          |
| Eucalyptus camaldulensis                |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 2          |
| Eucalyptus globulus                     |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Genista lucida                          |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 1          |
| Helianthus annuus                       |           |        |            |         |        |          |       |        |          |       |     |         |       |       |       | 3          |
### Update of the *Xylella* spp. host plant database – systematic literature search up to 30 June 2019

| *X. fastidiosa* subspecies/sequence type | Natural infection | Artificial infection | Unspecified infection | Grand Total |
|----------------------------------------|-------------------|---------------------|----------------------|-------------|
|                                        | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
| Ipomoea purpurea                      | 2        |        |            |          |        |          |       |        |          |      |     |          | 2     | 2     |       |
| Juglans regia                         |          | 1      |            |          |        |          |       |        |          |      |     |          | 1     |       |       |
| Lactuca serriola                      |          |        |            |          |        |          |       |        |          |      |     |          | 3     | 3     |       |
| Malva parviflora                      |          |        |            |          |        |          |       |        |          |      |     |          | 2     | 2     |       |
| Medicago sativa                       |          |        |            |          |        |          |       |        |          |      |     |          | 3     | 3     | 11    |
| Metrosideros sp.                      |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Nicotiana glauca                      |          |        |            |          |        |          |       |        |          |      |     |          | 2     | 2     |       |
| Olea europaea                          |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Pluchea odorata                        |          |        |            |          |        |          |       |        |          |      |     |          | 1     |       |       |
| Polygala myrtifolia                    |          |        |            |          |        |          |       |        |          |      |     |          | 2     | 2     |       |
| Portulaca oleracea                     |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Prunus avium                          |          |        |            |          |        |          |       |        |          |      |     |          | 3     | 2     | 5     |
| Prunus dulcis                          |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 19    | 20    |
| Rhamnus alaternus                      |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Rubus ursinus                          |          |        |            |          |        |          |       |        |          |      |     |          | 2     | 2     |       |
| Rumex crispus                          |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Sambucus canadensis                    |          |        |            |          |        |          |       |        |          |      |     |          | 2     | 2     |       |
| Simmondsia chinensis                   |          |        |            |          |        |          |       |        |          |      |     |          | 2     | 2     |       |
| Solanum lycopersicum                   |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Solanum melongena                      |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Sonchus oleraceus                      |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Sorghum halepense                      |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Spartium junceum                      |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Vicia faba                             |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Vicia sativa                           |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Vitis aestivalis                       |          |        |            |          |        |          |       |        |          |      |     |          | 2     | 2     |       |
| Vitis girdiana                         |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 1     |       |
| Vitis sp.                              |          |        |            |          |        |          |       |        |          |      |     |          | 2     | 31    | 33    |
| Vitis vinifera                         |          |        |            |          |        |          |       |        |          |      |     |          | 1     | 3     | 18    |

**Grand Total**:

- **Argentina**: 2
- **Brazil**: 3
- **Costa Rica**: 1
- **Ecuador**: 3
- **France**: 2
- **Honduras**: 2
- **Italy**: 1
- **Mexico**: 1
- **Portugal**: 1
- **Spain**: 1
- **USA**: 1
- **Unknown**: 1
- **Total**: 41
### X. fastidiosa subspecies/sequence type

|                      | Natural infection | Artificial infection | Unspecified infection | Grand Total |
|----------------------|-------------------|----------------------|-----------------------|-------------|
|                      | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
| Xanthium strumarium  | 3         |         |            |         |         |         |       |        |          |       |     |         | 3     |       |       |
| ST2                  |           | 8       |           | 8       |         |         |       |        |          |       |     |         | 15    |       |       |
| Ambrosia artemisiifolia |        |         |            |         |         |         |       |        |          |       |     |         | 1     |       |       |
| Vitis rotundifolia   |           | 3       |           | 3       |         |         |       |        |          |       |     |         | 4     |       |       |
| Vitis sp.            |           | 5       |           | 5       |         |         |       |        |          |       |     |         | 5     |       |       |
| Vitis vinifera       |           |         |            |         |         |         |       |        |          |       |     |         | 5     |       |       |
| ST3                  |           | 1       |           | 1       |         |         |       |        |          |       |     |         | 1     |       |       |
| Lupinus aridorum     |           | 1       |           | 1       |         |         |       |        |          |       |     |         | 1     |       |       |
| ST4                  |           | 4       |           | 4       | 1       |         |       |        |          |       |     |         | 5     |       |       |
| Medicago sativa      |           |         |            |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| Vitis sp.            |           | 4       |           | 4       |         |         |       |        |          |       |     |         | 4     |       |       |
| ST17                 |           | 1       |           |         |         |         |       |        |          |       |     |         | 1     |       |       |
| Coffea arabica       |           |         |            |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| ST18                 |           | 1       |           |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| Vitis sp.            |           | 1       |           |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| ST19                 |           |         |            |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| Coffea arabica       |           | 1       |           |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| ST20                 |           | 1       |           |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| Coffea arabica       |           | 1       |           |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| ST21                 |           |         |            |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| Coffea arabica       |           | 1       |           |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| ST33                 |           | 1       |           |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| Coffea arabica       |           | 1       |           |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| ST47                 |           |         |            |         |         |         |       | 2       |          |       |     |         | 2     |       |       |
| Coffea arabica       |           | 1       |           |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| Vitis sp.            |           | 1       |           |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| ST52                 |           | 1       |           |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| Coffea arabica       |           |         |            |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
| ST54                 |           | 1       |           |         |         |         |       | 1       |          |       |     |         | 1     |       |       |
Update of the *Xylella* spp. host plant database – systematic literature search up to 30 June 2019

| *X. fastidiosa* subspecies/sequence type | Natural infection | Artificial infection | Unspecified infection | Grand Total |
|------------------------------------------|-------------------|---------------------|-----------------------|-------------|
|                                          | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
| 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     |
| Coffea arabica                           | 2         | 2      |            |         |        |          |       |        |          |       |     |         |       |       | 2     |
| ST72                                     | 1         | 1      |            |         |        |          |       |        |          |       |     |         |       |       | 1     |
| Coffea arabica                           | 1         | 1      |            |         |        |          |       |        |          |       |     |         |       |       | 1     |
| ST76                                     | 2         | 2      |            |         |        |          |       |        |          |       |     |         |       |       | 2     |
| Coffea arabica                           | 2         | 2      |            |         |        |          |       |        |          |       |     |         |       |       | 2     |
| ST77                                     | 1         | 1      |            |         |        |          |       |        |          |       |     |         |       |       | 1     |
| Coffea arabica                           | 1         | 1      |            |         |        |          |       |        |          |       |     |         |       |       | 1     |
| *fastidiosa/sandyi*                      | 3         | 1      |            |         |        |          |       |        |          |       |     |         | 4     | 4     |       |
| ST72                                     | 2         | 2      |            |         |        |          |       |        |          |       |     |         | 2     | 2     |       |
| Coffea arabica                           | 2         | 2      |            |         |        |          |       |        |          |       |     |         | 2     | 2     |       |
| ST75                                     | 1         | 1      |            |         |        |          |       |        |          |       |     |         | 1     | 1     |       |
| Coffea canephora                         | 1         | 1      |            |         |        |          |       |        |          |       |     |         | 1     | 1     |       |
| ST76                                     | 1         | 1      |            |         |        |          |       |        |          |       |     |         | 1     | 1     |       |
| Coffea arabica                           | 1         | 1      |            |         |        |          |       |        |          |       |     |         | 1     | 1     |       |
| *morus*                                  | 22        | 22     |            |         |        |          |       |        |          |       |     |         | 22    | 22    |       |
X. fastidiosa subspecies/sequence type

|                      | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Artificial infection | Unspecified infection | Grand Total |
|----------------------|-----------|--------|------------|---------|--------|----------|-------|--------|----------|-------|-----|---------|-------|-----------------------|-----------------------|-------------|
| **ST29**             |           |        |            |         |        |          |       |        |          |       |     |         | 7     | 7                      | 7                   |             |
| Morus alba           |           |        |            |         |        |          |       |        |          |       |     |         | 3     | 3                      | 3                   |             |
| Morus rubra          |           |        |            |         |        |          |       |        |          |       |     |         | 4     | 4                      | 4                   |             |
| **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                   |             |
| **multiplex**        |           |        |            |         |        |          |       |        |          |       |     |         | 3     | 81                     | 23                  | 15          |
|                      |           |        |            |         |        |          |       |        |          |       |     |         | 32    | 163                    | 317                 | 43         |
|                      |           |        |            |         |        |          |       |        |          |       |     |         | 16    | 376                    |                     |             |
| **ST6**              |           |        |            |         |        |          |       |        |          |       |     |         | 2     | 13                     | 25                  | 17         |
| Calicotome spinosa   |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Catharanthus roseus  |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Helichrysum italicum |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Medicago sativa      |           |        |            |         |        |          |       |        |          |       |     |         | 4     | 4                      | 4                   |             |
| Nicotiana tabacum    |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Olea europaea        |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Phagnalon saxatile   |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Polygala myrtifolia  |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Prunus armeniacia    |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Prunus cerasifera    |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Prunus domestica     |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Prunus dulcis        |           |        |            |         |        |          |       |        |          |       |     |         | 4     | 10                     | 14                  | 5           |
| Rhamnus alaternus    |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Rosmarinus officinalis|         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Rubus ursinus        |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1                      | 1                   |             |
| Spartium junceum     |           |        |            |         |        |          |       |        |          |       |     |         | 2     | 2                      | 2                   |             |
| Vitis vinifera       |           |        |            |         |        |          |       |        |          |       |     |         | 2     | 2                      | 2                   |             |

Update of the Xylella spp. host plant database – systematic literature search up to 30 June 2019

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| X. fastidiosa subspecies/sequence type | Natural infection | Artificial infection | Unspecified infection | Grand Total |
|--------------------------------------|-------------------|----------------------|-----------------------|-------------|
|                                      | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
| ST6 and ST7                          | 1         |       |            |         |       |         |       |       |         |       |     |         | 1     |       | 1     |
| Cistus monspeliensis                 | 1         |       |            |         |       |         |       |       |         |       |     |         | 1     |       | 1     |
| 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 salvirolius                  | 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     |
| X. fastidiosa subspecies/sequence type | Natural infection | Artificial infection | Unspecified infection | Grand Total |
|--------------------------------------|------------------|----------------------|----------------------|-------------|
|                                      | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
| Medicago sativa                      | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Metrosideros excelsa                 | 2         |         |           |         |         |         |       |       |         |       |     |         | 2     |       |       |
| Myrtus communis                      | 2         |         |           |         |         |         |       |       |         |       |     |         | 2     |       |       |
| Pelargonium graveolens               | 2         |         |           |         |         |         |       |       |         |       |     |         | 2     |       |       |
| Pelargonium sp.                      | 2         |         |           |         |         |         |       |       |         |       |     |         | 2     |       |       |
| Phagnalon saxatile                   | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Polygala myrtifolia                  | 7         |         |           |         |         |         |       |       |         |       |     |         | 7     |       |       |
| Polygala sp.                         | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Prunus cerasifera                    | 2         |         |           |         |         |         |       |       |         |       |     |         | 2     |       |       |
| Prunus dulcis                        | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Quercus suber                        | 2         |         |           |         |         |         |       |       |         |       |     |         | 2     |       |       |
| Rosa canina                          | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Rosmarinus officinalis               | 2         |         |           |         |         |         |       |       |         |       |     |         | 2     |       |       |
| Spartium junceum                     | 3         |         |           |         |         |         |       |       |         |       |     |         | 3     |       |       |
| Westringia fruticosa                 | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| **ST7**                              | **1**     |         |           |         | **15**  |         | **2** | **10** |         | **28** |       | **16** | **44** |       |       |
| Acacia longifolia                    | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Artemisia arborescens                | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Artemisia sp.                        | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Catharanthus roseus                  |           |         |           |         |         |         |       |       |         |       |     | **1**   |       |       |       |
| Coprosma repens                     | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Cytisus scoparius                    | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Dodonaea viscosa                     | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Ilex aquifolium                      | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Lavandula angustifolia               | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Lavandula dentata                    | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Medicago sativa                      |           |         |           |         |         |         |       |       |         |       |     | **2**   |       |       |       |
| Myrtus communis                      | 1         |         |           |         |         |         |       |       |         |       |     |         | 1     |       |       |
| Nicotiana tabacum                    |           |         |           |         |         |         |       |       |         |       |     | **1**   |       |       |       |

Update of the *Xylella* spp. host plant database – systematic literature search up to 30 June 2019

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**X. fastidiosa** subsp/ecotype

| Host Plant | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | Unknown | Total |
|------------|-----------|--------|------------|---------|-------|---------|-------|-------|---------|------|-----|---------|-------|
| Olea europaea | 1 | 1 | | | 4 | | | | | | 5 |
| Olea sp. | | | | | | | | | | | | 1 |
| Polygala myrtifolia | | | 1 | 2 | 1 | | | | | | 3 |
| Prunus cerasifera | | | | | | | | | | 1 | 1 |
| Prunus dulcis | 1 | 4 | 5 | 4 | | | | | | | 9 |
| Prunus sp. | | 1 | 1 | | | | | | | | 1 |
| Quercus suber | 1 | | | | | | | | | | 1 |
| Rosmarinus officinalis | | | | | | | | | 1 | 1 | 1 |
| Rubus fruticosus | | | | | | | | | 1 | 1 | 1 |
| Salvia mellifera | | | | | 3 | | | | 3 | | 3 |
| Ulex europaeus | | | | | | | | | 1 | 1 | 1 |
| Ulex minor | | | | | | | | | 1 | 1 | 1 |
| Vinca major | | | | | 1 | | | | 1 | | 1 |
| Vitis vinifera | | | | | | | | | | | 1 |

**ST8**

| Host Plant | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | Unknown | Total |
|------------|-----------|--------|------------|---------|-------|---------|-------|-------|---------|------|-----|---------|-------|
| Alnus rhombifolia | | | | | | | | | | 1 | 1 | 1 |
| Carya illinoinensis | | 1 | 1 | | | | | | | | 1 |
| Platanus occidentalis | | | | 5 | | | | | | | 5 |
| Quercus palustris | | | | | 1 | | | | | | 1 |
| Ulmus americana | | 1 | | | | | | | | | 1 |

**ST9**

| Host Plant | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | Unknown | Total |
|------------|-----------|--------|------------|---------|-------|---------|-------|-------|---------|------|-----|---------|-------|
| Quercus coccinea | 2 | | | | 2 | | | | | | 2 |
| Quercus falcata | 1 | 1 | 1 | | | | | | | | 2 |
| Quercus laevis | 2 | | | | 2 | | | | | | 2 |
| Quercus nigra | | | | | 1 | | | | | | 1 |
| Quercus palustris | 11 | 11 | | | | | | | | | 11 |
| Quercus phellos | | | | | 1 | | | | | | 1 |
| Quercus robur | | | | | 1 | | | | | | 1 |
| Quercus rubra | | | | | 5 | | | | | | 5 |
### Update of the *Xylella* spp. host plant database – systematic literature search up to 30 June 2019

| X. fastidiosa subspecies/sequence type | Natural infection | Artificial infection | Unspecified infection | Grand Total |
|--------------------------------------|-------------------|----------------------|-----------------------|-------------|
|                                      | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
| Quercus shumardii                    | 1         | 1      |            |         |        |          |       |        |          |       |     |          | 1     |        |        |
| Quercus sp.                          | 3         | 3      |            |         |        |          |       |        |          |       |     |          | 3     |        |        |
| Rubus fruticosus                     |           |        |            |         |        |          |       |        |          |       |     | 1        | 1     |        |        |
| ST10                                | 7         | 7      |            |         |        |          |       |        |          |       |     |          | 7     |        |        |
| Prunus domestica                     | 2         | 2      |            |         |        |          |       |        |          |       |     |          | 2     |        |        |
| Prunus persica                       | 3         | 3      |            |         |        |          |       |        |          |       |     |          | 3     |        |        |
| Prunus sp.                           | 2         | 2      |            |         |        |          |       |        |          |       |     |          | 2     |        |        |
| 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                                | 10        | 10     |            |         |        |          |       |        |          |       |     |          | 10    |        |        |
| Acer rubrum                          | 1         | 1      |            |         |        |          |       |        |          |       |     |          | 1     |        |        |
| Ambrosia trifida                     | 2         | 2      |            |         |        |          |       |        |          |       |     |          | 2     |        |        |
| Helianthus sp.                       | 2         | 2      |            |         |        |          |       |        |          |       |     |          | 2     |        |        |
| Iva annua                            | 1         | 1      |            |         |        |          |       |        |          |       |     |          | 1     |        |        |
| 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                                | 12        | 13     | 4          |         |        |          |       |        |          |       |     |          | 17    |        |        |
| Alnus rhombifolia                    | 1         | 1      |            |         |        |          |       |        |          |       |     |          | 1     |        |        |
### X. fastidiosa subspecies/sequence type

#### Natural infection

| Host Plant | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
|------------|-----------|--------|------------|---------|--------|----------|-------|--------|----------|-------|-----|----------|-------|-------|-------|
| Prunus cerasifera | 2 | 2 | 1 | 3 |
| Prunus domestica | 1 | 2 | 1 | 2 |
| Prunus dulcis | 1 | 1 | 1 | 1 |
| Prunus persica | 1 | 1 | 1 | 1 |
| Prunus sp. | 8 | 8 | 8 | 8 |
| Rubus fruticosus | 1 | 1 | 1 | 1 |
| **ST27** | 6 | 6 | 2 | 8 |
| Ginkgo biloba | 1 | 1 | 1 | 1 |
| Lagerstroemia sp. | 1 | 1 | 1 | 1 |
| Prunus cerasifera | 1 | 1 | 1 | 1 |
| Prunus dulcis | 2 | 2 | 1 | 3 |
| Prunus sp. | 2 | 2 | 2 | 2 |
| **ST28** | 4 | 4 | 1 | 5 |
| Ambrosia trifida | 2 | 2 | 1 | 3 |
| Helianthus sp. | 1 | 1 | 1 | 1 |
| Iva annua | 1 | 1 | 1 | 1 |
| **ST32** | 2 | 2 | 1 | 3 |
| Rubus fruticosus | 1 | 1 | 1 | 1 |
| Rubus sp. | 2 | 2 | 2 | 2 |
| **ST34** | 1 | 1 | 1 | 1 |
| Prunus cerasifera | 1 | 1 | 1 | 1 |
| **ST35** | 1 | 1 | 1 | 1 |
| Xanthium strumarium | 1 | 1 | 1 | 1 |
| **ST36** | 1 | 1 | 1 | 2 |
| Prunus cerasifera | 1 | 1 | 1 | 1 |
| Prunus sp. | 1 | 1 | 1 | 1 |
| **ST37** | 1 | 1 | 1 | 1 |
| Lupinus villosus | 1 | 1 | 1 | 1 |
| **ST38** | 1 | 1 | 1 | 1 |

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Update of the Xylella spp. host plant database – systematic literature search up to 30 June 2019

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# Update of the *Xylella* spp. host plant database – systematic literature search up to 30 June 2019

| X. fastidiosa subspecies/sequence type | Natural infection | Artificial infection | Unspecified infection | Grand Total |
|---------------------------------------|-------------------|---------------------|----------------------|-------------|
|                                       | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
| Platanus occidentalis                  | 1         | 1      | 1         | 66      | 6      | 1       |       |        |          |       |     |         | 1     |       | 1     |
| ST39                                  | 6         | 6      | 1         | 6       | 1      |         |        |        |          |       |     |         | 6     |       | 6     |
| Koelreuteria bipinnata                 | 1         | 1      | 1         | 4       | 4      | 1       |        |        |          |       |     |         | 1     |       | 1     |
| Liquidambar styraciflua                | 4         | 4      | 1         | 4       | 1      |         |        |        |          |       |     |         | 4     |       | 4     |
| Prunus sp.                            | 1         | 1      | 1         | 1       | 1      |         |        |        |          |       |     |         | 1     |       | 1     |
| ST40                                  | 3         | 3      | 1         | 5       | 4      | 1       |        |        |          |       |     |         | 5     |       | 5     |
| Prunus cerasifera                      | 3         | 3      | 1         | 4       | 1      |         |        |        |          |       |     |         | 4     |       | 4     |
| Sambucus sp.                          | 1         | 1      | 1         | 1       | 1      |         |        |        |          |       |     |         | 1     |       | 1     |
| ST41                                  | 3         | 3      | 2         | 5       | 3      | 1       |        |        |          |       |     |         | 5     |       | 5     |
| Prunus domestica                       | 1         | 1      | 1         | 1       | 1      |         |        |        |          |       |     |         | 1     |       | 1     |
| Prunus salicina                        | 1         | 1      | 1         | 1       | 1      |         |        |        |          |       |     |         | 1     |       | 1     |
| Prunus sp.                            | 1         | 1      | 1         | 1       | 1      |         |        |        |          |       |     |         | 1     |       | 1     |
| Ulmus americana                        | 2         | 2      | 2         | 2       | 2      |         |        |        |          |       |     |         | 2     |       | 2     |
| ST42                                  | 8         | 8      | 3         | 11      | 8      | 1       |        |        |          |       |     |         | 11    |       | 11    |
| Ambrosia trifida                      | 2         | 2      | 1         | 3       | 2      |         |        |        |          |       |     |         | 3     |       | 3     |
| Sapindus saponaria                    | 1         | 1      | 1         | 1       | 1      |         |        |        |          |       |     |         | 1     |       | 1     |
| Vaccinium ashei                       | 2         | 2      | 2         | 2       | 2      |         |        |        |          |       |     |         | 2     |       | 2     |
| Vaccinium corymbosum                  | 1         | 1      | 1         | 1       | 1      |         |        |        |          |       |     |         | 1     |       | 1     |
| Vaccinium corymbosum × V. angustifolium hybrid | 1 | 1 |         |         |       |         |        |        |          |       |     |         | 1     |       | 1     |
| Vaccinium sp.                         | 3         | 3      | 3         | 3       | 3      |         |        |        |          |       |     |         | 3     |       | 3     |
| ST43                                  | 4         | 4      | 2         | 6       | 4      | 1       |        |        |          |       |     |         | 6     |       | 6     |
| Vaccinium corymbosum                  | 1         | 1      | 1         | 1       | 1      |         |        |        |          |       |     |         | 1     |       | 1     |
| Vaccinium corymbosum × V. angustifolium hybrid | 1 | 1 |         |         |       |         |        |        |          |       |     |         | 1     |       | 1     |
| Vaccinium sp.                         | 4         | 4      | 4         | 4       | 4      |         |        |        |          |       |     |         | 4     |       | 4     |
| ST44                                  | 2         | 2      | 2         | 2       | 2      |         |        |        |          |       |     |         | 2     |       | 2     |
| Quercus palustris                     | 1         | 1      | 1         | 1       | 1      |         |        |        |          |       |     |         | 1     |       | 1     |
### Update of the *Xylella* spp. host plant database – systematic literature search up to 30 June 2019

| *X. fastidiosa* subspecies/sequence type | Natural infection | Artificial infection | Unspecified infection | Grand Total |
|-----------------------------------------|-------------------|---------------------|----------------------|-------------|
|                                         | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
| Quercus rubra                          |           |        |            |         |        |          |       |        |          |      |     |          |       |       |       |
| ST45                                    | 6        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Acer griseum                           | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Ampelopsis cordata                     | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Cercis canadensis                      | 3        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Gleditsia triacanthos                  | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| ST46                                    | 3        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Celtis occidentalis                    | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Chionanthus sp.                        | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Prunus armeniaca                      | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| ST48                                    | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Sapindus saponaria                     | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| ST49                                    | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Prunus sp.                             | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| ST50                                    | 2        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Fraxinus americana                     | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Fraxinus sp.                           | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| ST51                                    | 2        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Periwinkle (common name)               | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Vinca sp.                              | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| ST58                                    | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Ambrosia trifida                       | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| ST63                                    | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Prunus domestica                       | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| ST67                                    | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Prunus domestica                       | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| ST79                                    | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
| Polygala myrtifolia                    | 1        |       |            |         |        |          |       |        |          |      |     |          |       |       |       |
**X. fastidiosa**

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**Subspecies/Sequence Type**

| Subspecies/Sequence Type | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | Unknown | Total | Total | Total | Grand Total |
|--------------------------|-----------|--------|------------|---------|--------|----------|-------|--------|----------|-------|-----|---------|-------|-------|-------|-------------|
| **ST81**                 |           |        |            |         |        |          |       |        |          |       |     |         | 17    | 17    | 17    |             |
| Acacia sp.               | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Ficus carica             | 2         |        |            |         |        |          |       |        |          |       |     |         | 2     | 2     | 2     |             |
| Fraxinus angustifolia    | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Lavandula dentata        | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Olea europaea            | 2         |        |            |         |        |          |       |        |          |       |     |         | 2     | 2     | 2     |             |
| Olea europaea subsp. sylvestris | 2 |        |            |         |        |          |       |        |          |       |     |         | 2     | 2     | 2     |             |
| Polygala myrtifolia      | 2         |        |            |         |        |          |       |        |          |       |     |         | 2     | 2     | 2     |             |
| Prunus domestica         | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Prunus dulcis            | 2         |        |            |         |        |          |       |        |          |       |     |         | 2     | 2     | 2     |             |
| Rhamnus alaternus        | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Rosmarinus officinalis   | 2         |        |            |         |        |          |       |        |          |       |     |         | 2     | 2     | 2     |             |
| **ST82**                 |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Vaccinium ashei          | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| **ST83**                 |           |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Vaccinium ashei          | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| **ST87**                 | 23        |        |            |         |        |          |       |        |          |       |     |         | 23    | 23    | 23    |             |
| Calicotome spinosa       | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Cercis silquastrum       | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Cistus monspelensis      | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Cistus salvifolius       | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Cistus sp.               | 2         |        |            |         |        |          |       |        |          |       |     |         | 2     | 2     | 2     |             |
| Cytisus scoparius        | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Elaeagnus angustifolia   | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Ficus carica             | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Helichrysum sp.          | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Lavandula angustifolia   | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| Lavandula sp.            | 1         |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |             |
| X. fastidiosa subspecies/sequence type | Natural infection | Artificial infection | Unspecified infection | Grand Total |
|--------------------------------------|------------------|---------------------|----------------------|-------------|
|                                      | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
| Polygala myrtifolia                  | 3         | 3      |             |         |        |          |       |        |          |       |     |         | 3     |       |       |
| Prunus dulcis                        | 2         | 2      |             |         |        |          |       |        |          |       |     |         | 2     |       |       |
| Rhamnus alaternus                    | 2         | 2      |             |         |        |          |       |        |          |       |     |         | 2     |       |       |
| Rosmarinus officinalis               | 2         | 2      |             |         |        |          |       |        |          |       |     |         | 2     |       |       |
| Spartium junceum                    | 2         | 2      |             |         |        |          |       |        |          |       |     |         | 2     |       |       |
| pauca                                | 5         | 117    | 8           | 2       | 4      |          | 233   | 7      |          | 2     | 378 | 127     | 22    | 527   |       |
| ST11                                 | 49        |        |             |         |        |          |       |        |          |       |     |         | 49    | 14    | 3      |
| Catharanthus roseus                  | 2         |        |             |         |        |          |       |        |          |       |     |         | 2     |       |       |
| Citrus sinensis                     | 19        |        |             |         |        |          |       |        |          |       |     |         | 19    | 4     | 3      |
| Citrus sp.                           | 29        |        |             |         |        |          |       |        |          |       |     |         | 29    |       |       |
| Coffea arabica                      | 1         |        |             |         |        |          |       |        |          |       |     |         | 1     |       |       |
| Coffea sp.                           | 4         |        |             |         |        |          |       |        |          |       |     |         | 4     |       |       |
| Nicotiana tabacum                    | 4         |        |             |         |        |          |       |        |          |       |     |         | 4     |       |       |
| ST12                                 | 3         |        |             |         |        |          |       |        |          |       |     |         | 3     | 3     | 6      |
| Citrus sinensis                     | 1         |        |             |         |        |          |       |        |          |       |     |         | 1     | 2     | 4      |
| Citrus sp.                           | 2         |        |             |         |        |          |       |        |          |       |     |         | 2     |       |       |
| ST13                                 | 8         |        |             |         |        |          |       |        |          |       |     |         | 8     | 42    | 2      |
| Catharanthus roseus                  | 6         |        |             |         |        |          |       |        |          |       |     |         | 6     |       |       |
| Citrus reticulata                    | 3         |        |             |         |        |          |       |        |          |       |     |         | 3     |       |       |
| Citrus sinensis                     | 2         |        |             |         |        |          |       |        |          |       |     |         | 2     | 10    | 2      |
| Citrus sp.                           | 6         |        |             |         |        |          |       |        |          |       |     |         | 6     | 21    | 27     |
| Nicotiana tabacum                    | 1         |        |             |         |        |          |       |        |          |       |     |         | 1     |       |       |
| Periwinkle (common name)             | 1         |        |             |         |        |          |       |        |          |       |     |         | 1     |       |       |
| ST14                                 | 7         |        |             |         |        |          |       |        |          |       |     |         | 7     | 4     | 11     |
| Coffea arabica                       | 1         |        |             |         |        |          |       |        |          |       |     |         | 1     |       |       |
| Coffea sp.                           | 6         |        |             |         |        |          |       |        |          |       |     |         | 6     | 2     | 8      |
| Prunus domestica                     | 1         |        |             |         |        |          |       |        |          |       |     |         | 1     |       |       |
| Prunus sp.                           | 1         |        |             |         |        |          |       |        |          |       |     |         | 1     |       |       |

**Update of the Xylella spp. host plant database – systematic literature search up to 30 June 2019**
## Update of the *Xylella* spp. host plant database – systematic literature search up to 30 June 2019

| *X. fastidiosa* subspecies/sequence type | Natural infection | Artificial infection | Unspecified infection | Grand Total |
|-----------------------------------------|------------------|----------------------|-----------------------|-------------|
|                                        | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
| ST16                                   | 39        |        |            |        |        |          |       |        |          |       |     |         | 55    |       |       |
| *Citrus sinensis*                      |           |        |            |        |        |          |       |        |          |       |     |         | 1     | 1     | 1     |
| *Coffeea arabica*                      | 1         |        |            |        |        |          |       |        |          |       |     |         | 8     |       |       |
| *Coffeea sp.*                          | 17        |        |            |        |        |          |       |        |          |       |     |         | 18    |       |       |
| *Nicotiana tabacum*                    |           |        |            |        |        |          |       |        |          |       | 6   |         | 6     |       |       |
| *Olea europaea*                        | 21        |        |            |        |        |          |       |        |          |       |     |         | 22    |       |       |
| ST53                                   | 7         | 4     | 233        |       |        |          |       |        |          |       |     | 245     | 52    | 6     | 303    |
| *Acacia saligna*                       | 1         |        |            |        |        |          |       |        |          |       |     | 1       | 1     |       |       |
| *Amaranthus retroflexus*               | 3         |        |            |        |        |          |       |        |          |       |     | 3       | 3     |       |       |
| *Asparagus acutifolius*                | 2         |        |            |        |        |          |       |        |          |       |     | 2       | 2     |       |       |
| *Catharanthus roseus*                  | 2         |        |            |        |        |          |       |        |          |       |     | 2       | 2     |       |       |
| *Chamaesyce canescens*                 | 2         |        |            |        |        |          |       |        |          |       |     | 2       | 2     |       |       |
| *Chenopodium album*                    | 5         |        |            |        |        |          |       |        |          |       |     | 5       | 1     |       | 6      |
| *Cistus creticus*                      | 1         |        |            |        |        |          |       |        |          |       |     | 1       | 1     |       |       |
| *Coffeea arabica*                      | 2         |        |            |        |        |          |       |        |          |       |     | 2       | 2     |       |       |
| *Coffeea sp.*                          |           |        |            |        |        |          |       |        |          |       |     | 1       | 1     | 2     | 3      |
| *Dodonaea viscosa*                     | 1         |        |            |        |        |          |       |        |          |       |     | 1       | 1     |       |       |
| *Eremophila maculata*                  | 1         |        |            |        |        |          |       |        |          |       |     | 1       | 1     |       |       |
| *Erigeron bonariensis*                 | 3         |        |            |        |        |          |       |        |          |       |     | 3       | 3     |       |       |
| *Erigeron sp.*                         | 6         |        |            |        |        |          |       |        |          |       |     | 6       | 6     |       |       |
| *Eurixorharry terracina*               | 1         |        |            |        |        |          |       |        |          |       |     | 1       | 1     |       |       |
| *Grevillea juniperina*                 | 1         |        |            |        |        |          |       |        |          |       |     | 1       | 1     |       |       |
| *Hebe sp.*                             | 1         |        |            |        |        |          |       |        |          |       |     | 1       | 1     |       |       |
| *Heliotropium europaeum*               | 3         |        |            |        |        |          |       |        |          |       |     | 3       | 3     |       |       |
| *Laurus nobilis*                       | 1         |        |            |        |        |          |       |        |          |       |     | 1       | 1     |       |       |
| *Lavandula angustifolia*               | 1         |        |            |        |        |          |       |        |          |       |     | 1       | 1     |       |       |
| *Lavandula stoechas*                   | 1         |        |            |        |        |          |       |        |          |       |     | 1       | 1     |       |       |
| *Myoporum insulare*                    | 1         |        |            |        |        |          |       |        |          |       |     | 1       | 1     |       |       |

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| X. fastidiosa subspecies/sequence type | Natural infection | Artificial infection | Unspecified infection | Grand Total |
|--------------------------------------|------------------|---------------------|----------------------|-------------|
|                                      | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
| Myrtus communis                      | 1         | 1      |            |         |         |          |       |        |          |       |     |         |       |       |       |
| Nerium oleander                      | 5         | 8      |            |         |          |          |       |        |          |       |     |         | 13    | 6     | 4     | 23    |
| Nicotiana tabacum                    | 4         | 4      |            |         |          |          |       |        |          |       |     |         |       |       |       |
| Olea europaea                        | 1         | 154    |            |         |          |          |       |        |          |       |     |         | 155   | 25    | 180   |
| Osteospermum fruticosum              | 1         | 1      |            |         |          |          |       |        |          |       |     |         |       |       |       |
| Periwinkle (common name)             | 1         | 1      |            |         |          |          |       |        |          |       |     |         |       |       |       |
| Phillyrea latifolia                  | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 1     | 1     | 1     |
| Polygala myrtifolia                  | 1         | 7      |            |         |          |          |       |        |          |       |     |         | 8     | 5     | 13    |
| Prunus avium                         | 8         | 1      |            |         |          |          |       |        |          |       |     |         | 8     | 2     | 10    |
| Prunus dulcis                        | 4         | 4      |            |         |          |          |       |        |          |       |     |         | 4     | 4     | 8     |
| Prunus persica                       | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 1     | 1     | 1     |
| Quercus ilex                         | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 1     | 1     | 1     |
| Rhamnus alaternus                    | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 1     | 1     | 1     |
| Rosmarinus officinalis               | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 1     | 1     | 1     |
| Spartium junceum                     | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 1     | 1     | 1     |
| Vinca minor                          | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 1     | 1     | 1     |
| Westringia fruticosa                 | 4         | 1      |            |         |          |          |       |        |          |       |     |         | 4     | 1     | 4     |
| Westringia glabra                    | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 1     | 1     | 1     |
| ST64                                 | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 1     | 1     | 1     |
| ST65                                 | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 2     | 2     | 3     |
| ST66                                 | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 1     | 1     | 1     |
| ST68                                 | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 1     | 1     | 1     |
| Coffea arabica                       | 1         | 1      |            |         |          |          |       |        |          |       |     |         | 1     | 1     | 1     |
X. fastidiosa subspecies/sequence type

|                  | Natural infection | Artifical infection | Unspecified infection | Grand Total |
|------------------|-------------------|---------------------|-----------------------|-------------|
|                  | Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
| ST69             |           |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Citrus sinensis  | 4         |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Olea europaea    |           |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| ST70             | 1         |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Catharanthus roseus |        |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Hibiscus fragilis |          |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Hibiscus rosa-sinensis | | | | | | | | | | | | | |
| Hibiscus sp.     |          |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| ST71             | 1         |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Prunus domestica  |           |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| ST73             |           |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Coffea arabica   |           |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| ST73 and ST53    | 1         |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Coffea arabica   |           |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| ST74             | 2         |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Coffea arabica   | 2         |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| ST78             | 1         |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Prunus dulcis    | 1         |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| ST80             |           |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Acacia sp.       |           |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Lavandula dentata|           |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Olea europaea    |           |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Olea europaea subsp. sylvestris | | | | | | | | | | | | | |
| Polygala myrtifolia | | | | | | | | | | | | | |
| Prunus dulcis    | 1         |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Rosmarinus officinalis | | | | | | | | | | | | | |
| ST84             |           |        |           |         |        |          |       |        |          |       |     |         |       |       |       |
| Olea europaea    | 3         |        |           |         |        |          |       |        |          |       |     |         |       |       |       |

Update of the Xylella spp. host plant database – systematic literature search up to 30 June 2019
### Update of the *Xylella* spp. host plant database – systematic literature search up to 30 June 2019

**X. fastidiosa subspecies/sequence type**

| Argentina | Brazil | Costa Rica | Ecuador | France | Honduras | Italy | Mexico | Portugal | Spain | USA | unknown | Total | Total | Total |
|-----------|--------|------------|---------|--------|----------|-------|--------|----------|-------|-----|---------|-------|-------|-------|
| ST85      |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |
| Olea europaea |      |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |
| ST86      |        |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |
| Olea europaea |      |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |
| *sandyi*  | 1      | 1          | 1       |        |          |       |        |          |       |     |         | 28    | 26    | 4     |
| ST5       |        |            |         |        |          |       |        |          |       |     |         | 23    | 23    | 4     |
| *Hemerocallis* sp. | 1 | 1 | | | | | | | | | | 1 | 1 | 1 |
| *Jacaranda mimosifolia* | 1 | 1 | | | | | | | | | | 1 | 1 | 1 |
| *Magnolia grandiflora* | 1 | 1 | | | | | | | | | | 1 | 1 | 1 |
| Nerium oleander | 20 | 20 | 1 | | | | | | | | | | 21 |
| *Prunus dulcis* | | | | | | | | | | | | | 1 | 1 | 1 |
| *Vinca major* | | | | | | | | | | | | | 2 | 2 | 2 |
| ST72      | 1      |            |         |        |          |       |        |          |       |     |         | 1     | 1     | 1     |
| *Coffea arabica* | | | | | | | | | | | | | 1 | 1 | 1 |
| *Coffea sp.* | 1 | 1 | | | | | | | | | | 1 | 1 | 1 |
| ST76      | 1      | 1          |         |        |          |       |        |          |       |     |         | 2     | 2     | 2     |
| *Coffea sp.* | | | | | | | | | | | | | 1 | 1 | 1 |
| *Polygala myrtifolia* | | | | | | | | | | | | | 1 | 1 | 1 |
| Grand Total | 5 | 120 | 34 | 2 | 86 | 1 | 256 | 4 | 15 | 53 | 306 | 2 | 884 | 270 | 48 | 1,202 |