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Stephan Winter[1,2], Claude Bragard[2,3], Sara Tramontini[4], Miren Andueza[4], Giuseppe Stancanelli[4]

[1] Plant Virus Department, German Collection of Microorganisms and Cell Cultures, DSMZ GmbH
[2] EFSA Scientific Panel on Plant health, Parma - Italy
[3] Université catholique de Louvain, Earth&Life Institute, Louvain-la-Neuve - Belgium
[4] EFSA Animal and Plant Health Unit, Parma - Italy

Since the first detection of *Xylella fastidiosa* in Europe (Lecce, Italy, October 2013), the European Food Safety Authority (EFSA) conducted several activities to provide scientific advice and assistance to the European decision makers facing this emergency. In a first scientific advice provided in November 2013 (EFSA, 2013), EFSA concluded that prevention of pathogen entry is the most effective option to reduce the risk of its establishment and spread, particularly when targeted to the pathway of plants for planting and to the xylem-sap feeding insects, whose European species should be all regarded as potential vectors. Later, the EFSA Scientific Panel on Plant Health (the PLH Panel) conducted a more comprehensive evaluation which included the pest risk assessment of the pathogen for the EU territory and the evaluation of the effectiveness of all available risk reduction options against *X. fastidiosa* entry, spread and establishment. The final document, published in January 2015, provides a detailed analysis of the risk components and the management options against both the pathogen and its vectors (EFSA PLH Panel, 2015a). In appendix, a first list of the reported host plants and a review of confirmed non-European and potential European vector species are provided. In the same document, the PLH Panel recommended to conduct further research on the biology, epidemiology and control of the Puglia strain of *X. fastidiosa*. To address this last point and to reduce the uncertainties highlighted in the PLH Panel opinion, EFSA funded a pilot project to collect preliminary data on the susceptibility of important crops to the Puglia strain of *X. fastidiosa*. The overall goals were: (i) to study the host range of *X. fastidiosa* subsp. *pauca* strain CoDiRO; (ii) to provide an accurate description of the symptoms in olive and other known susceptible hosts; (iii) to investigate if other economically relevant plant species, like grapevines, citrus and oak, which have not been found infected under natural conditions in the outbreak areas, were susceptible to strain CoDiRO; (iv) to provide research-based information with regards to the implementation of a program for the evaluation of the susceptibility of a wider panel of host species. The project, which lasted for 18 months, was conducted by the CNR of Bari in collaboration with the University of Bari and the CRSFA of Locorotondo, Bari. Its findings (Saponari *et al*., 2016) substantially contributed to increasing the knowledge on the current situation in Puglia and furthermore provided evidence that strain CoDiRO is the causative agent of the olive quick decline syndrome, also highlighting differential responses of various olive varieties to *X. fastidiosa* strain CoDiRO infections. On 12-13 November 2015 (Brussels), EFSA hosted a workshop titled "*Xylella fastidiosa*: knowledge gaps and research priorities for the EU", where more than 100 scientists reflected on current knowledge and research priorities for the European territory. After the plenary session, the participants separated in discussion groups on i) surveillance and detection; ii) vectors' identity, biology, epidemiology and control; iii) plants: host range, breeding, resistance and certification; and iv) pathogen: biology, genetics, and control.

In addition, in the period 2015/ 2016, EFSA produced scientific and technical advice providing further clarifications on specific aspects:

- responding to an NGO claim (EFSA, 2015): EFSA concluded that the hypothesis that tracheomycotic fungi are the primary causal agents of olive quick decline syndrome was not supported by scientific evidence.
- assessing the effectiveness of hot water treatment against *X. fastidiosa* in dormant grapevine planting material (EFSA PLH Panel, 2015b): the PLH Panel considered the conditions prescribed to sanitize grapevine planting material against flavescence dorée (50°C for 45 min) also effective against *X. fastidiosa* and its subspecies.
- critically reviewing some studies on grapevine susceptibility to CoDiRO strain (EFSA PLH Panel, 2015c): the short timeframe of observations and the intermediate aspect of the results available allowed only to conclude that the results presented were coherent and provided converging lines of evidence that grapevine (*Vitis vinifera*) is not a major susceptible host of *X. fastidiosa* strain CoDiRO. However, it was considered premature to exclude that systemic infection of *V. vinifera* and *Vitis* sp. could occur and that infections at limited foci could serve as a source of inoculum.
- updating the *X. fastidiosa* host plant database (EFSA, 2016): the current version of the database includes reports of hosts of *X. fastidiosa* published up to 20 November 2015, with a list of *X. fastidiosa* host plant species counting 359 plant species (including hybrids) from 204 genera and 75 different botanical families. Compared to the previous version of the database, 44 new species and 2 new hybrids, 15 new genera and 5 new families were introduced, the majority of which (70%) was identified for the first time in Puglia, Corsica and southern France outbreaks.
- responding to six queries statements regarding the EU control strategy against *X. fastidiosa* (EFSA PLH Panel 2016a, b, c) and in particular on:
  - *factors affecting symptom expression and spread of X. fastidiosa:* all interventions that support vigorous growth and development of the plant lead to improving its health status, its resilience and prolong its productive phase but do not cure the plant from bacterial infections;
  - *the etiology of the CoDiRO disease on olives:* it was confirmed by the EFSA funded pilot project (Saponari et al., 2016) that the pathogen *X. fastidiosa* subsp. *pauca* is the causal agent of the CoDiRO disease of olive plants;
  - *host plant removal as an option for containment or eradication:* this was considered in a system-based approach as an option to prevent further spread of the pathogen to new areas;
  - *secondary effects of pesticides on the interaction of X. fastidiosa with infected olive trees:* such effects were not substantiated as currently there is no evidence on negative effects of such treatments on the severity of symptoms and the outcome of the infection;
  - *efficacy of current treatment solutions to cure X. fastidiosa diseased plants, in particular those under evaluation by two research groups in Puglia olive orchards:* the Panel acknowledged the potentially positive effects of such treatments in prolonging the productive phase of olive trees and their putative relevance for the management of olive orchards, particularly in the containment area where eradication of the pathogen is considered no longer possible;
  - *assessing the diversity of the population of Xylella fastidiosa subsp. pauca in Puglia:* this evaluation is currently ongoing.

In the future EFSA aims to keep supporting the EU and its Member States in the prevention and control of *X. fastidiosa*, as well as other emerging plant health threats, by providing up to date

scientific advice and assistance to risk managers and developing and maintaining tools such as the databases and models for pest risk assessment.

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