

Oral Presentations

Session 1 - *Xylella fastidiosa*: a global threat.

***Xylella fastidiosa*, new risks from an old threat**

Almeida R.*

*University of California Berkeley; Berkeley CA (US)

Abstract: *X. fastidiosa* has long been considered a major threat to European flora. However limited interest had been paid to this exotic bacterium, as it had never been shown to be established in Europe. This changed significantly and rapidly after the detection of *X. fastidiosa* in southern Italy in 2013, followed by a series of reports primarily from France and Spain. In the span of just four years the status of *X. fastidiosa* at several Mediterranean regions went from absent to established. In addition, *X. fastidiosa* was introduced multiple independent times, and much of the known diversity of this pathogen is represented in these introductions. In this context, some of the emerging risks to European flora will be discussed.

Biology and pathogenicity of *Xylella fastidiosa* associated to olive quick decline syndrome

Saponari M.*, Boscia D., Altamura G., Loconsole G., Zicca S., D'Attoma G., Morelli M., Palmisano F., Saponari A., Dongiovanni E., Cavalieri V., Savino V.N., Martelli G.P.

*CNR, Istituto per la Protezione Sostenibile delle Piante, Bari (IT)

Abstract: A large program of mechanical inoculations and vector-mediated transmission experiments was launched in the past 2 years, and continuously implemented, in the attempt to disclose the role of the olive-infecting strain of *X. fastidiosa* in the olive quick decline disease (OQDS) and to ascertain the crop species under threat due to the expansion of the severe epidemic in southern Italy. Artificial inoculations were performed using the selected olive strain "De Donno" on different olive and grape cvs, stone fruit and citrus species, and ornamentals. These plant species, but including a larger number of olive cultivars, were also tested through field experiments set in the demarcated infected area, by exposing *Xylella*-free plants to the natural inoculum pressure and/or by caging naturally infected *Philaenus spumarius*. Comparison of the bacterial infection rates recovered upon mechanical inoculations and vector transmission (field experiments), showed perfect agreement regarding the susceptibility of the different host species: (i) high rates of systemically infected plants were obtained for olives, with some differences in relation to the cultivars, oleanders and *Poligala myrtifolia*; (ii) very low host colonization occurred for cherry and almond plants; (iii) no bacterial movement and host colonization could be detected in grapes, citrus, apricot, peach and plum. The pathogenicity of this strain has been also demonstrated; severe symptoms were detected on the most susceptible hosts.

Acknowledgment

This work was supported by the European Food Safety Authority (EFSA) in the framework of the "Pilot project on *X. fastidiosa* to reduce risk assessment uncertainties" (NP.EFSA.ALPHA.2014.07) and by the European Union's Horizon 2020 Research and Innovation Programme, under grant agreement No. 635646, POnte (Pest Organisms Threatening Europe).

Emergence of *Xylella fastidiosa* in Balearic Islands, Spain: Current situation

Olmo D., Montes-Borrego M., Nieto A., Adrover F., Urbano A., Beidas O., Juan A., Marco E., López M.M., Moran F., Monterde A., Navas-Cortés J.A., Landa B.B.*

*CSIC, Instituto de Agricultura Sostenible, Cordoba (ES)

Abstract: During official surveys in late autumn 2016 in Mallorca Island, Spain, the bacterium was first detected in a garden center near the locality of Manacor. Since then, as of April 24, 2017, a total