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## Estimate of the potential economic impact of *Xylella fastidiosa* in the European olive sector

- POnTE was one of the first EU funded research projects to put together scientists from a wide range of disciplines with the aim of studying specific plant pests with a comprehensive approach.
- Against this background, economists investigated the direct and indirect economic impacts of Xylella fastidiosa in the European olive sector.

## **POnTE Project**

The EU Horizon 2020 financed POnTE project started in 2015 and concluded in 2019. POnTE gathered 25 organizations and 120 researchers from 10 EU and three non-EU countries to foster and share knowledge for the prevention, detection, control, and management of a group of plant pests threatening crops, biodiversity, and the economy in Europe.

## Xylella fastidiosa

The bacterium Xylella fastidiosa is one of the most threatening plant pests in the world. It can colonize more than 550 plant species and is pathogenic on a wide range of them, including grapevine, citrus, almond, oleander, peach, coffee, avocado, olive tree, and oak. Once confined to North and South America, Xylella fastidiosa was first detected in Europe in 2013.



• Outside of Europe and with respect to other host species, the economic impact of *Xylella fastidiosa* is significant.

As a primary agent of Pierce's disease affecting grapevines, the bacterium causes economic losses of around 100 million dollars per year for growers in California.





- As part of the POnTE project, economists developed a model to quantify the magnitude of potential economic impacts associated with the possible future spread of the bacterium in Italy, Greece and Spain, which together account for nearly 95% of European olive production.
- According to this model, growers could suffer production losses from 2.38 to 7.49 billion euros over 50 years if replanting with resistant varieties is not feasible. If replanting is feasible, the impact could range from 0.80 to 2.93 billion euros.
- As far as indirect costs are concerned, researchers found that consumers will likely be
  affected by price increases, with decreases in welfare between 4.43 and 15.46 billion
  Euros over 50 years. Producer surpluses are likely to decrease in Italy while increasing
  in other countries due to higher producer prices, but these gains will not outweigh
  the losses to consumers.

## New findings, new questions

The model developed within the POnTE project shows that in the absence of effective management measures, olive growers and consumers would be affected the most by the spread of *Xylella fastidiosa* in Europe. When new plant pests are detected for the first time in a specific territory, estimating their economic and social impact is of the utmost importance to raise public awareness about the actual risks of the infection and to establish pest management strategies accordingly. Especially in large infected areas – as in the case of the *Xylella fastidiosa* epidemic in Apulia – the success of control, eradication and containment measures also depends on the active participation of stakeholders, such as farmers. From this perspective, sound economic models will be essential also in the future, providing information that may act as incentives to stakeholders and citizens to participate in the management strategies.



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