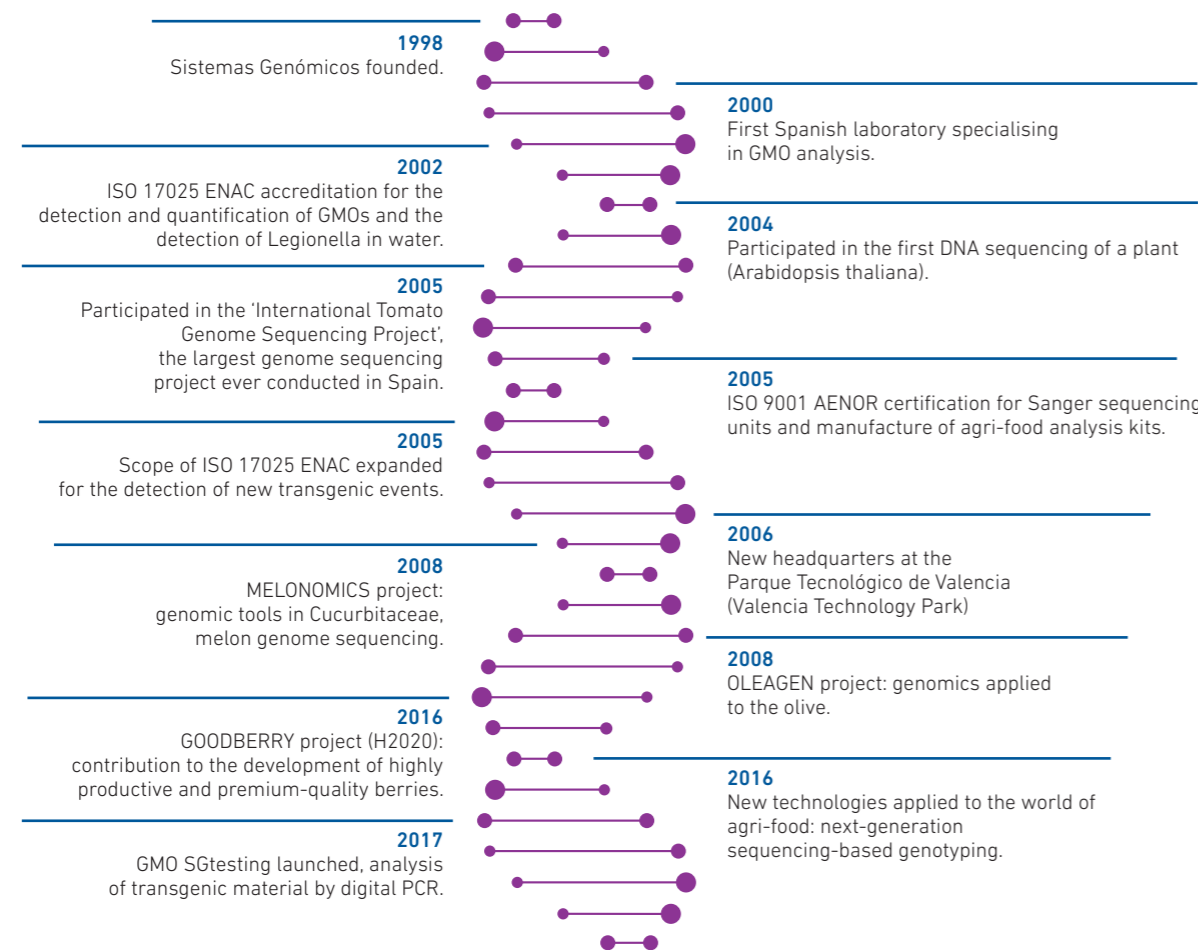


Sistemas Genómicos (ASCIRES) is Spain's first and largest company specialised in genetic sequencing, with two decades of experience in the field of molecular biology and genetics. Using genetic techniques in the field of agrigenomics, Sistemas Genómicos contributes to compliance with current legislation on plant protection and transgenics and helps in the proper management of agricultural starting materials.

Sistemas Genómicos is currently involved in numerous customised research, development and innovation (R&D&i) projects with the specific aim of offering this new research to industry and society. Key to its success are the company's 120-plus-strong workforce, who contribute a wide range of experience in the fields of molecular biology, bioinformatics and genetics.



Sistemas Genómicos is registered in the public health laboratories register of the Conselleria de Sanitat Universal y Salut Pública.



SERVICE FOR DETECTING THE BACTERIUM *XYLELLA FASTIDIOSA* BY REAL-TIME PCR

- Molecular detection technique with the highest sensitivity available on the market.
- Early identification of infected plants.
- Detection service developed according to EPPO European recommendations.

SG XylellaTesting is the most sensitive molecular analysis service available for the early detection of the bacterium *Xylella fastidiosa*, a bacterium capable of transmitting both by grafting and by insect vectors.

Sistemas Genómicos is contributing, with genetic-based tools, **to the contingency plan for the threat posed by *Xylella fastidiosa* for European agriculture**. We provide **molecular analytical detection services that contribute to achieving its eradication**.

With over 20 years of experience in genetic analysis, the application of cutting-edge technology has allowed us to develop SGXylellaTesting, **the most sensitive molecular analysis service available for the early detection of this bacterium** even in plants that, despite being infected, do not present symptoms.



The analysis of plant material is vital for the control of the bacterium. SGXylellaTesting can be applied both for the **early detection of already infected plants** and for the **preventive analysis of all imported plant material** susceptible of being infected.



Thus, SGXylellaTesting is a highly accurate and reliable tool for plant protection and for the success of containment protocols aimed **at preventing the dispersion of the bacterium to other crops or geographical areas**.

ORIGINAL ADAPTED INFRASTRUCTURES

- Laboratory fitted out according to RD 39/1998 on the conditions for the introduction into the national territory of certain harmful organisms, plants, plant products and other objects, for testing purposes, scientific purposes and for the activity of variety selection.
- Laboratory authorised by Sanidad Vegetal.
- Laboratory adheres to the official EU protocols for laboratories in member states, EPPO 2018, PM 7/24 (3) *Xylella fastidios*.



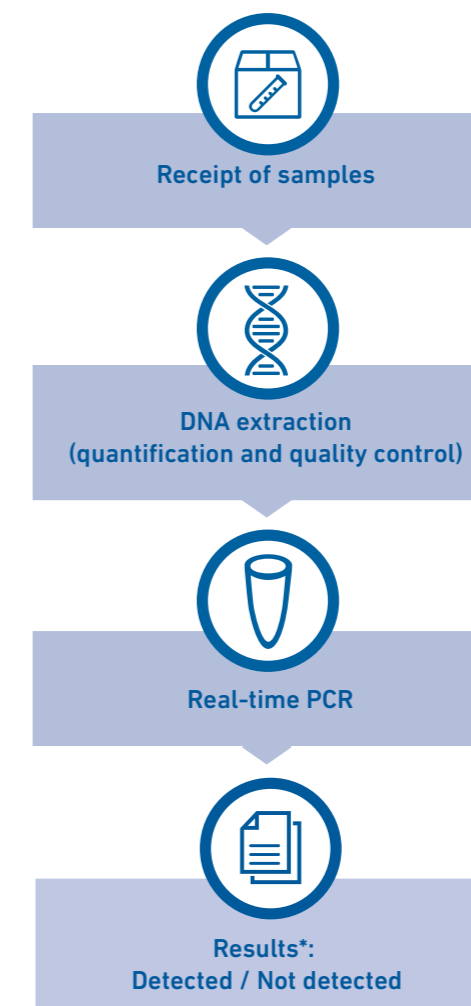
MAIN ADVANTAGES

- **ANTICIPATION:**
Early detection of already infected plants, even if they are asymptomatic.
- **PREVENTION:**
Control analysis of imported plant material susceptible to infection.
- **ACCURACY:**
Real-time PCR analytical methodology of the highest sensitivity available.
- **IMMEDIACY:**
Results available in 12 hours.



METHOD

- **DNA Extraction:** Processing of plant material susceptible to infection by *Xylella fastidiosa*.
- **DNA Analysis:** Application of two Real-Time PCR systems (EPPO 2018) aimed at amplifying specific areas of the bacterial genome, based on Francis et al. (2006) and Harper et al. (2010; erratum 2013).
- **Results:**
Available in 12, 24 or 48 hours.
 - **Normal mode:** Result in 48 hours.
 - **Urgent mode:** Result in 24 hours.
 - **Express mode:** Result in 12 hours.



*Two different molecular methods for the detection of the bacterium.