ITC CONFERENCE GRANT
SCIENTIFIC REPORT

This report is submitted for approval by the grant to the MC Chair.

Action number: CA16107
Conference title: Second European Conference on *Xylella fastidiosa*
Conference start and end date: 29/10/2019 to 30/10/2019
Conference attendance start and end date: 29/10/2019 to 30/10/2019
Grantee name: Aitana Ares Yebra

ACTIVITIES DURING YOUR ATTENDANCE AT THIS CONFERENCE:

The last 29 to 31 of October I attended several presentations and discussion on the latest data about biology and pathogenicity of *Xylella fastidiosa*, its detection and surveillance and its insect vectors as well as different aspects related to ecology, epidemiology, modelling. The last day there was also a small demonstration and explanation of a study carried out in Corsica on the capture of *Philaenus* sp., one of the vectors of *Xylella fastidiosa.*

IMPACT ON YOUR RESEARCH AND FUTURE COLLABORATIONS (if applicable)

Was really important for my research and/or work the new strategies for simultaneous detection and identification of *Xylella fastidiosa* subspecies in plant tissues and the optimization of sampling and testing procedures for detection *Xylella fastidiosa* in large lots of plants for planting and nursery stocks. I work in a phytopathology laboratory where we analyze samples from nursery and samples from outbreak in Portugal. There is great concern about the minimum concentration detected, is being clarified that any technique has a minimum concentration and different opinions were also shared about the false positives with several methods of PCR. Another issue of concern for us was the presence and/or absence of detection of *Xylella* in samples presenting late Ct, seeing that this is generally shared among the different researchers working with *Xylella fastidiosa.* It is very difficult to explain the appearance and disappearance of *Xylella* detection in these cases being also much more complex or even impossible to isolate the bacteria. This was a problem shared by all the researchers. Was interesting known that the several subspecies of *Xylella* had a temperature determines growth and biofilm formation in several areas. Almost in vitro, the same subspecies from a different area can have different growth at different temperature.

Was presented a quick and efficient method for detection of *Xylella* in olive plants based on tissue-print. This technique is already used by us for the detection of Citrus tristeza virus (CTV) and it would be easy to apply as screening in the detection of *Xylella*. The problem is that the technique was only tested on olive trees less than two years old and the diversity both in age and type of host is such that more research is needed.

We presented the poster “Characterization of the olive xylem microbiome community by metabarcoding greatly depends on the matrix used to extract DNA and 16S Universal Bacterial PCR primers” in collaboration with the Institute for sustainable agriculture. In the future, at MICROBIOTEC´19 to be presented with their collaboration an oral communication “The microbiome of xylem sap associated with almond leaf scorch disease caused by *Xylella fastidiosa* in South-East Spain”. We are preparing a scientific publication.