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| Title | Detection of <i>Xylella fastidiosa</i> and its vectors on different hosts in the Antalya City and determination of Disease Control Strategies Based on Risk Management |
| Number | |
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Abstract: *Xylella fastidiosa* is a xylem limited pathogen with very wide host range listed in quarantine regulation of EU and Turkey. The bacterium is a potential threat for economically important crops such as olives, grapes, citrus fruits, stone fruits and almonds grown widely in Turkey. The bacterium is transmitted by xylem feeding insects from Cercopoidea, Cicadoidea and Membracoidea families. The concern on the pathogen has increased since it has been detected on olive trees in Italy in 2013 where it had enormous negative impact. In EFSA risk assessment the pathogen was mentioned to treat European Agriculture and plant health more than any other pest. Early detection of the pest in the new areas and its eradication are very important. Its presence in Turkey as a high risk group country is not confirmed but existence of some records strengthens doubts about it. Also import of propagation materials and plants for plantings from countries where the pest is present (like Italy) increases the risk for pathogen entry. It is not known if the pathogen has entered or established with imports made up to now. No information is available for insect vectors that may play role in its spread in the country. However precise information for the presence of the pathogen in the country and its potential vectors is necessary for preparation of pest preventing action plan.

The aims of the study are detection of the pathogen and determination of its vectors in citrus, olive, grape, almond production areas in Antalya city, developing monitoring strategies and creation awareness between growers and technical staff of extension services. For this reasons survey will be carried out in citrus, olive, grape, almond growing areas and samples will be collected. Serological and molecular methods will be used for detection. Isolation and other diagnostic tools will be used for identification after pathogen has being detected. Also surveillance schemes for monitoring will be developed and awareness on the disease by training of growers and preparation of printed materials will be increased. The Project results will be used in national risk assessment and national action plan for control of *X. fastidiosa*. In case of detection of the pathogen the eradication measures will be taken.