



Xylella fastidiosa and the olive quick decline syndrome

19-22 April, 2016

Bari, Italy

The work done/actions taken in Iran related to *Xylella fastidiosa*

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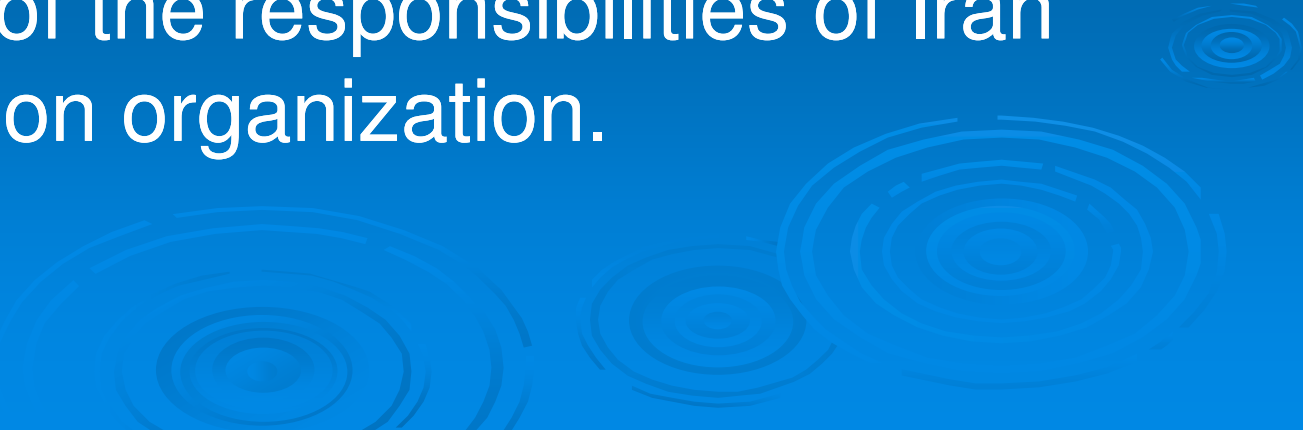
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Olive trees situation in Iran

Olive trees growing areas are nearly 100,000 hectares in Iran, and are increasing based on the latest information. Olives play an important role in olive tree grower's life. Therefore, the protection of olive trees from quarantine and destructive pests is one of the responsibilities of Iran plant protection organization.

The background of the slide features a blue gradient with several faint, concentric circular ripples in the lower right quadrant, resembling water droplets on a surface.

What is *Xylella fastidiosa*?

Xylella fastidiosa (Wells et al., 1987) is one of the most dangerous plant bacteria worldwide, causing a variety of diseases, with huge economic impact for agriculture. It causes enormous financial losses in commercial crops such as grapes and citrus. It has a very broad host range



Awareness raising and training activities undertaken in Iran

In general, for any quarantine pests, "**Guidelines for Diagnosis & Detection of Quarantine Pests**" are provided by relevant officers in plant protection organization of Iran and then will be sent to plant protection officers in all provinces. A directive regarding the bacterium *Xylella fastidiosa* was provided and sent to all plant quarantine officers across Iran. The quarantine officers will familiarize farmers and growers such as olive growers subsequently.

Any person who suspects or becomes aware of the presence of the bacterium shall immediately inform the responsible official body. The responsible official body shall immediately record such information. Where the presence of a quarantine pest is confirmed, the plant protection organization of Iran shall without delay the appropriate quarantine measures.

Plant protection organization website

W W W.PPO.IR



Surveillance and diagnostic activities conducted on *Xylella fastidiosa*

Annual surveys for the presence of quarantine pests in Iran on specified plants are conducting. Surveys are carried out by the responsible official body, or under official supervision of the responsible official body. They shall consist of visual examinations and, in the case of any suspicion of infection by any quarantine pests, collection of samples and testing. Surveys are carried out at appropriate times of the year with regard to the possibility to detect the quarantine pests.

Plant quarantine officers shall conduct official annual surveys for the presence of the bacterium on specified plants in their provinces. Diagnostic activities conducted on *Xylella fastidiosa* would be based on PCR if needed. The results of the surveys shall be notified to plant protection organization of Iran.

National competent authorities should be immediately informed of any suspected case of *Xylella fastidiosa* so that the necessary measures can be taken.

Based on our surveillance and diagnostic activities, there is no report of the bacterium in Iran and negative results have been reported so far on olives.

Phytosanitary measures implemented against the disease and its vectors

- *Xylella fastidiosa* is regulated as a harmful organism with quarantine status. It is listed as a quarantine pest and the introduction of this organism into Iran shall be banned.
- The main entry pathway for the bacterium is the movement of plants for planting. Infective vectors of *X. fastidiosa* transported on plant consignments are also of concern.
- Current import rules have been further strengthened. This means that imports from infected countries of the specified plants are only possible if the plants are grown under protected conditions and, prior to their export and on entry into Iran, they are inspected, sampled and tested for the absence of the bacterium. The import from pest free countries or pest free areas is possible only if Iran has officially been previously notified of the health status of these areas.


In order to reduce the risk of introduction of quarantine pests such as *X. fastidiosa*, the following items are required:

- Conducting pest risk analysis (PRA) in order to issuance of an import permit
- An import permit
- A completed phytosanitary certificate, issued by the NPPO of the exporting country. The phytosanitary certificate must accompany each consignment. It must include additional declarations that indicate the status of the plant lot. Phytosanitary certificates must be endorsed with the following additional declaration:
 - 1- The area in which the nursery stock was grown was free of *Xylella fastidiosa*.
 - 2- The imported nursery stock was tested in the exporting country and found -free of *Xylella fastidiosa*.

- Imported plants and fruits should be free from vectors, possibly by use of an appropriate treatment
- Conducting the on-site inspection and quarantine which provides:
 - 1- Further details for carrying out a PRA
 - 2- Growing area investigations
 - 3- Mode of propagating
 - 4- Mode of disinfestations/disinfections
 - 5- Quarantine conditions of plant material holding after productions and propagations
 - 6- Mode of operations after packing, holding and issuance of phytosanitary certificate
 - 7- Documentations regarding related pests and diseases
 - 8- Growing season inspection for disease symptoms expression especially on leaves.

Phytosanitary measures on arrival of plant material and nursery stock:

Plant quarantine officers will have visual inspections; and sampling of the lot of the specified plants at the entry point to confirm the absence of the bacterium, its vectors or its symptoms. Samples will be sent to an approved diagnostic laboratory for issuing the primary health certificate after testing.




Post-entry quarantine facilities

- Imported plants may harbor pests and have the potential to introduce quarantine pests.
- holding imported plants for planting, in order to verify whether or not they are infested with quarantine pests.

Because of the impossibility of verifying the presence of quarantine pests in imported consignment at entry, post-entry quarantine facilities are required.

This allows for testing for the presence of pests, time for the expression of signs or symptoms, and appropriate treatment if necessary. Post-entry quarantine facilities must meet specific Requirements

- Imported nursery stock will be grown for a minimum of 12 months in approved post-entry quarantine facilities.
 - It may be extended if material is slow growing, pests are detected, or treatments/testing are required.
 - The facility where plants are grown is insect-proof.
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Plants will be inspected and tested for *Xylella fastidiosa* and other regulated pests. A positive detection of *Xylella fastidiosa* will result in destruction of the consignment.

The plants may be released from the post-entry quarantine station at the completion of the PEQ period if they are found to be free from quarantine pests.



THANKS
for the
kind
attention