NAME OF THE ORGANISM: Onion yellow dwarf virus (OYDV00)

GENERAL INFORMATION ON THE PEST

Name as submitted in the project specification (if different to the preferred name):
 
  
Pest category:
 
Viruses and viroids **1- Identity of the pest/Level of taxonomic listing:**  
Is the organism clearly a single taxonomic entity and can it be adequately distinguished from other entities of the same rank?
 
Yes  
Is the pest defined at the species level or lower?:
 
Yes  
Can listing of the pest at a taxonomic level higher than species be supported by scientific reasons or can species be identified within the taxonomic rank which are the (main) pests of concern?

* Not relevant: Vegetable propagating and planting material (other than seeds) sector

Is it justified that the pest is listed at a taxonomic rank below species level?
 
Not relevant  
Conclusion:

* Candidate: Vegetable propagating and planting material (other than seeds) sector

**2 – Status in the EU:**
   
Is this pest already a quarantine pest for the whole EU?
 
No  
Presence in the EU:
 
Yes  
List of countries (EPPO Global Database):
 
Austria (1993); Czech Republic (2011); Denmark (1984); Estonia (1984); Finland (2011); France (1984); Germany (1993); Hungary (1992); Poland (1984); Romania (1984); United Kingdom (1993); United Kingdom/England (1994); United Kingdom/Scotland (1994)  
Conclusion:
 
candidate  
Justification (if necessary):
 
Data of the presence of this pest on the EU territory are available in EPPO Global Database (<https://gd.eppo.int/>).

HOST PLANT N°1: Allium sativum (ALLSA) for the Vegetable propagating and planting material (other than seeds) sector.

Origin of the listing:
 
2 - Vegetable seedling sector: Commission Directive 93/61/EC  
Plants for planting:
 
Plants intended for planting **3 - Is the pest already listed in a PM4 standard on the concerned host plant?**
 
No 
Conclusion:
 
Evaluation continues **4 - Are the listed plants for planting the main\* pathway for the "pest/host/intended use" combination? (\*: significant compared to others):**
 
Yes 
Conclusion:
 
Candidate  
 
Justification:
 
The virus survives in garlic bulbs and sets and volunteer garlic and is transmissible during vegetative production by Myzus persicae. This crop is usually produced by cloves or (rarely) bulbils. Therefore garlic cloves could be potentially infected during their production. If all others sources were removed through efficient cultivations etc, then plants for planting could be considered significant compared to other sources. This virus is often associated with Leek yellow stripe virus which is also common. **5 - Economic impact:**  
Are there documented reports of any economic impact on the host?
 
Yes  
Justification:
 
This virus causes a severe mosaïc in garlic in combination with other viruses (Compendium of Onion and Garlic Diseases, 2008). Garlic is always vegetatively multiplicated. Vegetative propagation of garlic often leads to mixed virus infections that cause significant yield and quality reduction. Onion yellow dwarf virus (OYDV), Leek yellow stripe virus (LYSV) and Garlic common latent virus (GCLV) are the most common viruses in Allium species in the Mediterranean region (Vončina et al., 2016). Yield decrease of 30% to 60% are observed on different varieties (Messiaen et al., 1993).  
What is the likely economic impact of the pest irrespective of its infestation source in the absence of phytosanitary measures? (= official measures)
 
Major  
Is the economic impact due to the presence of the pest on the named host plant for planting, acceptable to the propagation and end user sectors concerned?
 
No  
Conclusion:
 
Candidate  
Justification:
 
 **6 - Are there feasible and effective measures available to prevent the presence of the pest on the plants for planting at an incidence above a certain threshold (including zero) to avoid an unacceptable economic impact as regards the relevant host plants?**
 
Yes
 
Conclusion:
 
candidate  
Justification:
 
 **7- Is the quality of the data sufficient to recommend the pest to be listed as a RNQP?**
 
Yes
 
Conclusion:
 
Candidate  
Justification:
 
 **CONCLUSION ON THE STATUS:**
 
Recommended for listing as an RNQP, based on data. Garlic is always produced by vegetative multiplication. **8 - Tolerance level:**  
Is there a need to change the Tolerance level:
 
Yes  
Proposed Tolerance levels:
 
1% tolerance, based on visual examination, with a 10% associated failure rate. **9 - Risk management measures:**  
Is there a need to change the Risk management measure:
 
Yes  
Proposed Risk management measure:
 
(a) The crop has been inspected at least once at an appropriate time since the beginning of the last complete cycle of vegetation and no symptoms of Onion yellow dwarf virus have been seen;  
or  
(b) The crop has been inspected at least once at an appropriate time since the beginning of the last complete cycle of vegetation in which not more than 10% of the plants showed symptoms of Onion yellow dwarf virus, with those plants rogued out immediately and not more than 1% of plants showing symptoms seen in a final inspection. **REFERENCES:**

* Compendium of Onion and Garlic Diseases (2008) Second edition. The American Phytopathological Society;
* Messiaen JM, Leroux JP, Pichon M & Beyries A (1993) "les allium alimentaires reproduits par voie végétative" du labo au terrain. Edition INRA;
* Vončina D, Ćurić K, Fabek S & Toth N (2016) First report of Onion yellow dwarf virus, Leek yellow stripe virus, and Garlic common latent virus on garlic in Croatia. Plant Disease 100 No.3, pp 656-657;