NAME OF THE ORGANISM: Viteus vitifoliae (Daktulosphaira vitifoliae) (VITEVI)

GENERAL INFORMATION ON THE PEST

Name as submitted in the project specification (if different to the preferred name):

Pest category:

Insecta **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: Vine sector, Ornamental sector

Is it justified that the pest is listed at a taxonomic rank below species level?

Not relevant
Conclusion:

* Candidate: Vine sector, Ornamental 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 (2015); Bulgaria (2011); Croatia (2011); Czech Republic (2011); France (2011); France/Corse (1982); Germany (2011); Greece (2007); Hungary (1992); Italy (1998); Italy/Sicilia (1982); Italy/Sardegna (2012); Luxembourg (1988); Malta (2011); Poland (2011); Portugal (2011); Portugal/Azores (2005); Portugal/Madeira (2008); Romania (2011); Slovakia (2011); Slovenia (2011); Spain (2016); Spain/Islas Baleares (2011); United Kingdom (2011); United Kingdom/England (2011)
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/>). This pest is a candidate for the RNQP status according to the IIA2AWG

HOST PLANT N°1: Vitis (1VITG) for the Vine sector.

Origin of the listing:

IIA2AWG
Plants for planting:

Plants intended for planting, other than seeds **3 - Is the pest already listed in a PM4 standard on the concerned host plant?**

Yes
Conclusion:

Evaluation continues

Justification (if necessary):

In the RNQP Questionnaire, NL, HR and FR asked for deregulation arguing that the economic impact is acceptable with regards to the intended use. As a consequence, full methodology is applied for this pest. Remark: the pest is only controlled visually in EPPO PM 4/8(2) Standard. **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 IIA2 AWG concluded that Vitis planting material is the main pathway of spreading. The EFSA Panel focused on the analysis of available risk reduction options against entry and spread and states the only relevant pathway is plants intended for planting (EFSA PLH, 2014). Other sources of potential infestation of clean plants are by natural spread although the pest does not actively disperse over long distances, from survival in the soil for up to five years without its host, and by human assistance from one field to another (EFSA PLH, 2014). **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

The pest is already very widespread in the risk assessment area, occurring almost everywhere Vitis plants are present. Grafting with resistant rootstocks throughout the EU ensures that the production of fruit and plants for planting is rarely affected by phylloxera infestations and, if so, only at a limited level (EFSA PLH, 2014). EFSA also mentions that, however, the impacts in terms of yield, fruit quality and vine vigour have rarely been quantified. Two reports describe severe infestations can lead to withering and even the death of vines and root infestation usually kills vines in 3 to 10 years. The IIA2 AWG explains that several authors refer to phylloxera as a permanent biotic stress factor. These reports describe yield reductions, reduced plant vigour, decreased frost resistance and reduced longevity due to the presence of phylloxera on the roots of grafted vines. Moreover, frequently the indirect damage produced by pathogenic fungi and nematodes entering damaged roots is the final cause of plant decline. Thus, V. vitifoliae has an impact on the intended use of plants for planting (EU COM, 2016). Impact is rated as massive on ungrafted plants, as outbreaks of phylloxera where plants are not grafted can readily have dramatic consequences on the production of Vitis in fruit and plants for planting except in some areas where soil conditions are not suitable (EFSA PLH, 2014). Hence infestation in marketed ungrafted plants for planting are likely to have a serious impact.
What is the likely economic impact of the pest irrespective of its infestation source in the absence of phytosanitary measures? (= official measures)

Massive
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:

Only grafted plants survive to the disease. Impact is rated as massive on ungrafted plants, as outbreaks of phylloxera where plants are not grafted can readily have dramatic consequences on the production of Vitis in fruit and plants for planting (EFSA PLH, 2014). **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:

According to EFSA PLH 2014, following effective measures are available:(i) visual inspections, (ii) restricting trade to scions grafted on resistant rootstocks, (iii) limiting the types of grapevine planting material to be traded such as dormant cuttings that carry fewer phylloxera, (iv) certification schemes with complementary measures designed to ensure pest freedom, (v) pest-free areas, (vi) treatments of the consignment (especially fumigation and hot water treatments), (vii) restrictions in the trade of the consignment after entry, (viii) internal surveillance and (ix) containment.
Although measures such as restricting trade to cuttings with scions grafted on resistant rootstocks together with fungicide and hot water treatments can be highly effective. **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 **8 - Tolerance level:**
Is there a need to change the Tolerance level:

Yes
Proposed Tolerance levels:

Zero tolerance on marketed plants of non-grafted V. vinifera. Other plants would be covered by general requirement for ‘lowest possible level’.
Justification (if necessary):

Use of resistant rootstocks prevent from an unacceptable economic impact. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

Yes
Proposed Risk management measure:

(a) Use of resistant rootstocks;
or
(b) Plants produced in areas known to be free from Viteus vitifoliae;
or
(c) [Possibly - pest free place of production under protected cultivation - could be considered further for higher categories];
or
(d) Fumigation, hot water or other appropriate treatment.
Justification (if necessary):

Resistant rootstocks host the pest. Hybrids are not completely resistant, it is sometimes recommended to graft them. **REFERENCES:**

* EFSA Panel on Plant Health (PLH) (2014) Scientific Opinion on the risk to plant health posed by Daktulosphaira vitifoliae (Fitch), in the EU territory, with the identification and evaluation of risk reduction options. EFSA Journal 2014;12(5):3678, 67 pp. doi:10.2903/j.efsa.2014.3678 Available online: www.efsa.europa.eu/efsajournal;
* EU COM (2016) Recommendation of the Working Group on the Annexes of the Council Directive 2000/29/EC – Section II – Listing of Harmful Organisms as regards the future listing of Daktulosphaira vitifoliae (Fitch);

HOST PLANT N°2: Vitis (1VITG) for the Ornamental sector.

Origin of the listing:

IIA2AWG
Plants for planting:

Plants intended for planting, other than seeds **3 - Is the pest already listed in a PM4 standard on the concerned host plant?**

Yes
Conclusion:

Evaluation continues

Justification (if necessary):

In the RNQP Questionnaire for the fruit sector, NL, HR and FR asked for deregulation arguing that the economic impact is acceptable with regards to the intended use. As a consequence, full methodology is applied for this pest. Remark: the pest is only controlled visually in the EPPO PM 4/8(2) Standard. **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:

Grapevine is occasionally grown as an ornamental plant e.g. Roger's Red, an interspecific hybrid between wild grape (Vitis californica) and the V. vinifera cv. Alicante Bouschet, and Claret Vine (V. vinifera cv. Purpurea Nana) in North America and ornamental vine Vitis coignetiae in Europe. Therefore the conclusions from the Vitis sector may be used:
The IIA2 AWG concluded that Vitis planting material is the main pathway of spreading. The EFSA Panel focused on the analysis of available risk reduction options against entry and spread and states the only relevant pathway is plants intended for planting (EFSA PLH, 2014). Other sources of potential infestation of clean plants are by natural spread although the pest does not actively disperse over long distances, from survival in the soil for up to five years without its host, and by human assistance from one field to another (EFSA PLH, 2014). **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

?
Justification:

The pest is already very widespread in the risk assessment area, occurring almost everywhere Vitis plants are present. Grafting with resistant rootstocks throughout the EU ensures that the production of fruit and plants for planting is rarely affected by phylloxera infestations and, if so, only at a limited level (EFSA PLH, 2014). EFSA also mentions that, however, the impacts in terms of yield, fruit quality and vine vigour have rarely been quantified. Two reports describe severe infestations can lead to withering and even the death of vines and root infestation usually kills vines in 3 to 10 years. The IIA2 AWG explains that several authors refer to phylloxera as a permanent biotic stress factor. These reports describe yield reductions, reduced plant vigour, decreased frost resistance and reduced longevity due to the presence of phylloxera on the roots of grafted vines. Moreover, frequently the indirect damage produced by pathogenic fungi and nematodes entering damaged roots is the final cause of plant decline. Thus, V. vitifoliae has an impact on the intended use of plants for planting (EU COM, 2016). Impact is rated as massive on ungrafted plants, as outbreaks of phylloxera where plants are not grafted can readily have dramatic consequences on the production of Vitis in fruit and plants for planting except in some areas where soil conditions are not suitable (EFSA PLH, 2014). Hence infestation in marketed ungrafted plants for planting are likely to have a serious impact.
What is the likely economic impact of the pest irrespective of its infestation source in the absence of phytosanitary measures? (= official measures)

Massive
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:

Only grafted plants survive to the disease. Impact is rated as massive on ungrafted plants, as outbreaks of phylloxera where plants are not grafted can readily have dramatic consequences on the production of Vitis in fruit and plants for planting (EFSA PLH, 2014). **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:**

Not recommended for listing as an RNQP: This pest/host/intended use combination meets all the criteria for RNQP status. However the requirement for absence of visual symptoms on the traded material (current general 'Substantially free from' requirement in the EU) is considered to be sufficient to mitigate the risk in the EU. Areas which are free from the pest should be protected as ‘protected zones’, with additional measures needed to mitigate the risks from relevant pathways including ornamental vitis. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

Yes
Proposed Tolerance levels:

Delisting. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

Yes
Proposed Risk management measure:

Delisting. **REFERENCES:**

* EFSA Panel on Plant Health (PLH) (2014) Scientific Opinion on the risk to plant health posed by Daktulosphaira vitifoliae (Fitch), in the EU territory, with the identification and evaluation of risk reduction options. EFSA Journal 2014;12(5):3678, 67 pp. doi:10.2903/j.efsa.2014.3678 Available online: www.efsa.europa.eu/efsajournal;
* EU COM (2016) Recommendation of the Working Group on the Annexes of the Council Directive 2000/29/EC – Section II – Listing of Harmful Organisms as regards the future listing of Daktulosphaira vitifoliae (Fitch);