NAME OF THE ORGANISM: Xanthomonas fragariae (XANTFR)

GENERAL INFORMATION ON THE PEST

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

Pest category:

Bacteria **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: Fruits (including hops) sector, Ornamental sector

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

Not relevant
Conclusion:

* Candidate: Fruits (including hops) 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 (2013); Belgium (2013); Bulgaria (2013); Finland (2011); France (2013); Germany (2013); Italy (2013); Italy/Sicilia (2000); Netherlands (2015); Portugal (2013); Slovenia (2013); Spain (2013)
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: Fragaria (1FRAG) for the Fruits (including hops) 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:

Qualified **CONCLUSION ON THE STATUS:**

Recommended for listing as an RNQP, based on EPPO PM 4 Standard. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

No
Proposed Tolerance levels:

Zero tolerance based on visual examination for the marketed material. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

Yes
Proposed Risk management measure:

Non-certified material (‘CAC’):
(A) Derived from mother plants which have been inspected and found free from symptoms of Xanthomonas fragariae.
AND
(B) (a) Plants produced in areas known to be free from Xanthomonas fragariae;
or
(b) Site of production found free from Xanthomonas fragariae over the last complete growing season by visual inspection and any symptomatic plants in the immediate vicinity, and the neighbouring plants, rogued out and destroyed immediately;
or
(c) No more than 5% of plants in the lot showing symptoms during inspections at appropriate times during the last growing season, and those plants and any symptomatic plants in the immediate vicinity, and the neighbouring plants, rogued out and destroyed immediately.

Pre-basic, Basic, Certified material, additional measures could include:
• Rest period from host plants of at least one year between findings of the pest and next planting;
• Testing of pre-basic mother plants;
• Pre-basic, Basic: no symptoms seen at two inspections at appropriate times during the last growing season;
• Isolation from other host plants (protected cultivation or buffer zone);
• 2% failure rate for certified rather than 5% (for non-certified).
Justification (if necessary):

In case of finding, destruction of plants in a buffer zone is needed. A rest period is justified for Pre-basic, Basic and/or Certified material as the pest can survive in plant tissues. **REFERENCES:**

* EU COM (2014) 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 of Xanthomonas fragariae;
* Van der Gaag DJ, Bergsma-Vlami M, Van Vaerenbergh J, Vandroemme J & Maes M (2013) Pest risk analysis for Xanthomonas fragariae. Netherlands Food and Consumer Product Safety Authority, Utrecht, the Netherlands - Institute for Agricultural and Fisheries Research, Merelbeke, Belgium - available at <https://www.nvwa.nl/txmpub/files/?p_file_id=2203331>;

HOST PLANT N°2: Fragaria (1FRAG) 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):

Fragaria is covered by EPPO PM 4/11 Standard. F. vesca is a minor host and F. x ananassa (cultivated strawberry) a major host according to the EPPO Global Database. It has been detected in Fragaria chiloensis in the field. Ornamental Fragaria may be propagated vegetatively (e.g. cv. Lipstick) or by seed (alpine strawberry F. vesca). **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:

No references could be found to the susceptibility or resistance of ornamental strawberry to infestation by X. fragariae, as compared to the variation in normal strawberry cultivars, so it is concluded these species would react to the pest in a similar way to commercial cultivars. The pathogen can survive in plant debris in soil for at least 5.5 months in the Netherlands, but transfer to subsequent crops appears not very likely in mild winters or periods favouring debris decomposition (EFSA 2013).
It is concluded plants for planting are a pathway, and can be considered a significant pathway compared to others. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

No
Justification:

No specific documented references could be found for impacts on ornamental strawberry.
What is the likely economic impact of the pest irrespective of its infestation source in the absence of phytosanitary measures? (= official measures)

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?

Yes
Is there unacceptable economic impact caused to other hosts (or the same host with a different intended use) produced at the same place of production due to the transfer of the pest from the named host plant for planting?

No
Conclusion:

Not candidate
Justification:

There are no data available on the economic impact on ornamental strawberry. Experts considered that ornamental Fragaria is a very minor use. Therefore they concluded that the ‘substantially free from’ requirement is sufficient to prevent indirect unacceptable economic impacts. **CONCLUSION ON THE STATUS:**

Disqualified: no data of economic impact on ornamentals. Experts considered that ornamental Fragaria is a very minor use. Therefore they concluded that the ‘substantially free from’ requirement is sufficient to prevent indirect unacceptable economic impacts. **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:**

* EPPO (2008) Certification scheme for strawberry. Bulletin OEPP/EPPO Bulletin 38, 430–437;
* EU COM (2014) 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 of Xanthomonas fragariae;
* Van der Gaag DJ, Bergsma-Vlami M, Van Vaerenbergh J, Vandroemme J & Maes M (2013) Pest risk analysis for Xanthomonas fragariae. Netherlands Food and Consumer Product Safety Authority, Utrecht, the Netherlands - Institute for Agricultural and Fisheries Research, Merelbeke, Belgium - available at <https://www.nvwa.nl/txmpub/files/?p_file_id=2203331>;