NAME OF THE ORGANISM: Candidatus Phytoplasma solani (Potato stolbur mycoplasm) (PHYPSO)

GENERAL INFORMATION ON THE PEST

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

Candidatus Phytoplasma solani
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: Seed potato sector

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

Not relevant
Conclusion:

* Candidate: Seed potato 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 (2014); Bulgaria (2014); Croatia (2015); Czech Republic (2009); France (2014); Germany (2010); Greece (2014); Hungary (2011); Italy (2010); Italy/Sicilia (1995); Poland (1999); Slovakia (2000); Slovenia (2011); Spain (2014)
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: Solanum tuberosum (SOLTU) for the Seed potato sector.

Origin of the listing:

IIA2AWG
Plants for planting:

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

Yes
Conclusion:

Evaluation continues

Justification (if necessary):

In EPPO PM 4/28 Standard the crop should be free from Potato stolbur phytoplasma. However, because of the NL comment concerning the main pathway, further analysis was carried out by the SEWG on the pathway question. **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:

Candidatus Phytoplasma solani' (CPs) is transmitted by grafting and vegetative propagation of infected hosts, and by several insect vector species (EU COM, 2016). With the exception of lavender and maize, most crops affected by CPs are dead-end hosts as they are not hosts for the insect vectors. However weed species can act as a reservoir (EFSA, 2014). In Germany the organism was for example found in potatoes in two consecutive years in the same area and the suspected source was infected weeds in the surroundings (EPPO Reporting Service 2008/213; 2010/155). As a consequence, natural spread from the reservoir of infected weed species is the main pathway of spread to actively growing crops in areas where the organism is present. However economic impact arises at the start of the growing season, because most infected seed potatoes do not grow (‘effect on the intended use’). Up to that point, the plants for planting are considered to be the main (indeed only) pathway. Moreover presence of the vectors varies in different parts of the region (plants for planting are also the main pathway in area where vectors are not present). **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Justification:

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?

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?

Conclusion:

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?**

Conclusion:

Justification:

 **7- Is the quality of the data sufficient to recommend the pest to be listed as a RNQP?**

Conclusion:

Justification:

 **CONCLUSION ON THE STATUS:**

Recommended for listing as an RNQP, based on EPPO PM 4 Standard and additional analysis of the pathway. Economic impacts have been reported in the SEWG. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

No
Proposed Tolerance levels:

Zero tolerance of symptoms in the growing crop. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

Yes
Proposed Risk management measure:

(A) No symptoms of 'Candidatus Phytoplasma solani' have been seen at the place of production since the start of the last complete cycle of vegetation;
OR
(B) (a) Any plants at the site of production showing symptoms have been rogued out, with their progeny tubers, and destroyed;
and
(b) For any stocks in which symptoms have been seen in the growing crop, post harvest tuber testing has been carried out, for each lot, to confirm the absence of 'Candidatus Phytoplasma solani'. Any lots testing positive should not be marketed as seed potatoes.

Reports of the new occurrences of 'Candidatus Phytoplasma solani' should continue to be reported to EPPO during the transition from QP to RNQP status so that the effects of that change can be monitored. **REFERENCES:**

* EFSA Panel on Plant Health (PLH) (2014) Scientific Opinion on the pest categorisation of Candidatus Phytoplasma solani. EFSA Journal 2014;12(12):3924, 27 pp. doi:10.2903/j.efsa.2014.3924 <http://www.efsa.europa.eu/en/efsajournal/doc/3924.pdf>;
* 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 Potato stolbur mycoplasma, renamed Candidatus Phytoplasma solani;