NAME OF THE ORGANISM: Candidatus Phytoplasma prunorum (Apricot chlorotic leafroll mycoplasm) (PHYPPR)

GENERAL INFORMATION ON THE PEST

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

Apricot chlorotic leafroll mycoplasm
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: Forest reproductive material sector

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

Not relevant
Conclusion:

* Candidate: Forest reproductive material sector

Justification (if necessary):

For the Fruit and ornamental sectors: Candidatus phytoplasma prunorum has been detected frequently on Prunus armeniaca, P. salicina, P. domestica, P. persica and more rarely on P. amygdalus (Cieślińska, 2011). Wild species of P. spinosa and P. cerasifera are frequently host plants. This diversity is supporting a listing at the Genus level for Prunus.
For the Forestry sector: Prunus avium is the only host of the Prunus genus listed in Annex I of EU Directive 1999/105. However experts also considered during the evaluation other Prunus species, since other species are more susceptible to the disease and could also be grown in forest nurseries. **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 (2012); Belgium (2012); Bulgaria (2012); Croatia (2012); Czech Republic (2012); France (2012); France/Corse (2012); Germany (2012); Greece (2012); Hungary (2012); Italy (2012); Italy/Sardegna (2012); Poland (2012); Romania (2012); Slovakia (2012); Slovenia (2012); Spain (2015); United Kingdom (2000); United Kingdom/England (2000)
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.
Comment by forestry experts: Since no targeted surveys of CPp infection on tolerant hosts (such as Prunus avium) are undertaken, the distribution of CPp in Europe is unclear and suspected to be underestimated, especially in Northern countries where sensitive hosts such as apricot and peach are not produced. The wild forms (Prunus spinosa) was surveyed together with Cacopsylla pruni across Germany and CPp was confirmed across the country (both, systemic and latent) (Dr. Jaraush, personal communication).

HOST PLANT N°1: Prunus (1PRNG) for the Forest reproductive material 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?**

No
Conclusion:

Evaluation continues

Justification (if necessary):

Prunus avium is the only host plant belonging to the Prunus genus and listed in the EU Marketing Directive for forest reproductive material. Prunus avium is not covered by EPPO PM 4/30 Standard. Prunus avium is included in EPPO PM 4/29 Standard (Certification scheme for cherries for fruit) but Candidatus phytoplasma prunorum is not included there because P. avium was considered resistant and not a significant host of this pathogen (EU COM, 2016). **4 - Are the listed plants for planting the main\* pathway for the "pest/host/intended use" combination? (\*: significant compared to others):**

?
Conclusion:

Justification:

Prunus plants for planting can be a very efficient pathway, when propagated from infested plants. Vector transmission is also a pathway. However sweet cherries (P. avium), sour cherries (P. cerasus) and bird cherry (P. padus) are highly resistant and do not play a role in the epidemiology (EU COM, 2016). Plants for planting of P. avium are not the main pathway for this pest/host/combination. However evaluation continues in relation to other Prunus species used for forestry purpose. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

No
Justification:

No information of possible impacts on forest plants is known (Symptoms of ESFY are obvious only in P. armeniaca, P. salicina and P. persica, whereas other important species are either tolerant, usually not showing symptoms. For Prunus avium, no impact is known on forest plants nor on fruit plants).
What is the likely economic impact of the pest irrespective of its infestation source in the absence of phytosanitary measures? (= official measures)

Minimal
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 is probably no economic impact for the forestry use. However forest plants may be produced at the same place of production than plants for the fruit production. Measures may be proposed on Prunus for the fruit sector to prevent from any cross-contamination, if nurseries produce fruit and forest trees at the same time. Prunus avium which is highly resistant, hosts neither the pathogen nor the vector. **CONCLUSION ON THE STATUS:**

Disqualified: No economic impact in the forestry Sector. **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:**

* ANSES (2012) Rapport d'expertise collective. Groupe de travail "ARP phytoplasmes des arbres fruitiers". Available at <https://www.anses.fr/fr/system/files/SVEG2011sa0137Ra.pdf>;
* Ciesliñska M & Smolarek T (2015) Molecular diversity of phytoplasmas infecting cherry trees in Poland. Phytopathogenic Mollicutes 5, S31-S32;
* 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 Apricot chlorotic leafroll mycoplasma;
* Prima phacie (2012) Pest risk assessment for the European Community plant health: A comparative approach with case studies. External scientific report by group of authors: <http://www.efsa.europa.eu/fr/supporting/doc/319e.pdf>;
* Ludvikova H, Franova J & Sucha J (2011) Phytoplasmas in apricot, peach and sour cherry orchards in East Bohemia, Czech Republic. Bulletin of Insectology 64: S67-S68;
* Marcone C, Jarausch B, Jarausch W (2010) Candidatus Phytoplasma prunorum, the causal agent of European stone fruit yellows: an overview. Journal of Plant Pathology 92, 19-34.
* Mehle N, Ravnikar M, Seljak G, Knapic V & Dermastia M (2011) The most widespread phytoplasmas, vectors and measures for disease control in Slovenia. Phytopathogenic Mollicutes 1, 65-76;
* Tarcali G & Kövics GJ (2012) New data of Ca. Phytoplasma prunorum occurrence in the Eastern part of the Carpathian-Basin. Journal of Agricultural Sciences, Debrecen 50, 105-110;