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: Ornamental sector

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

Not relevant
Conclusion:

* Candidate: Ornamental 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: Very limited number of analyses were performed on Prunus avium, but besides older data, new reports are confirmed from Poland (Cieslinska 2015), Czech Republic (Ludvikova et al., 2011) and Hungary (Tarcali & Kovics, 2012). Since no targeted surveys of CPp infection on Prunus avium are undertaken, the distribution of CPp in Europe is unclear and suspected to be underestimated.

HOST PLANT N°1: Prunus (1PRNG) 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):

All species of the Prunus genus are not covered by the EPPO PM 4/30 Standard, evaluation continues for the whole genus. **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:

Plants for planting are an efficient pathway. Pathogen concentration and distribution in the trees is fluctuant in space and during the year. Wild tolerant hosts are an important source of infection (Seljak and Rot, 2013) and are present in most of the regions producing stone fruit. Vector transmission is a pathway, especially in regions where the vector Cacopsylla pruni is present. In these regions vector transmission might be the main pathway, but it is still important, even in these regions, to delay the occurrence of symptoms and damages. Experts concluded that plants for planting are a significant pathway compared to other pathways. Remark: Plant species which are used as ornamentals, such as Fraxinus excelsior, Celtis australis, Rosa canina and wild Prunus species (e.g. Prunus spinosa), have been found to be infected by this phytoplasma (Jarausch et al., 2001; Carraro et al., 2002). Carraro et al. (2002) concluded that such plants are natural hosts for both the pathogen and the insect-vector, thus the cycle of the pathogen can be completed independently from the presence of cultivated stone-fruit trees, and thus the presence of these plants in an area play a role in the epidemiology of the disease. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

No information of possible impacts on ornamental plants. However plants in the surroundings of stone-fruit tree orchards have been found infected by this phytoplasma (Jarausch et al., 2001; Carraro et al., 2002) and thus they may cause indirect economic impact.
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?

Yes
Conclusion:

Candidate
Justification:

There is probably no economic impact for the ornamental use. However ornamental plants may be produced at the same place of production than plants for the fruit production, or planted in the surrounding area of stone-fruit orchards. It may be necessary to take measures on ornamental plants, in view of the risk they pose to the fruit sector. **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 potential indirect economic impacts on fruit crops at the same place of production. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

No
Proposed Tolerance levels:

Zero tolerance approach, based on visual examination and/or testing. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

Yes
Proposed Risk management measure:

(A) Derived from mother plants which have been inspected and found free from symptoms of 'Candidatus Phytoplasma prunorum'.
AND
(B) (a) Plants produced in areas known to be free from 'Candidatus Phytoplasma prunorum';
or
(b) Site of production found free from 'Candidatus Phytoplasma prunorum' over the last complete growing season by visual inspection and any symptomatic plants in the immediate vicinity rogued out and destroyed immediately;
or
(c) No more than 2% of plants in the site of production showing symptoms during inspections at appropriate times during the last growing season, and those plants and any symptomatic plants in the immediate vicinity rogued out and destroyed immediately, and a representative sample of the remaining asymptomatic plants in the lots in which symptomatic plants were found has been tested and found free from 'Candidatus Phytoplasma prunorum'.
Justification (if necessary):

Experts recommended extrapolating measures from the fruit sector. Most ornamental Prunus are grafted on P. avium rootstocks. **REFERENCES:**

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