NAME OF THE ORGANISM: Helicobasidium brebissonii (Rhizoctonia violacea) (HLCBBR)

GENERAL INFORMATION ON THE PEST

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

Pest category:

Fungi **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: Vegetable propagating and planting material (other than seeds) sector, Seed potato sector

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

Not relevant
Conclusion:

* Candidate: Vegetable propagating and planting material (other than seeds) sector
* Not evaluated: Seed potato sector

Justification (if necessary):

Helicobasidium brebissonii (Teleomorph) is the preferred name to be used according to the seed potato SEWG. **2 – Status in the EU:**

Is this pest already a quarantine pest for the whole EU?

No
Presence in the EU:

Yes
Conclusion:

candidate
Justification (if necessary):

The pest is present in the EU, for example in France (Molot et al., 1975), Germany, Italy (Fiume & Fiume, 2003) and Slovenia (Celar & Valič 2002).

HOST PLANT N°1: Asparagus officinalis (ASPOF) for the Vegetable propagating and planting material (other than seeds) sector.

Origin of the listing:

2 - Vegetable seedling sector: Commission Directive 93/61/EC
Plants for planting:

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

No
Conclusion:

Evaluation continues **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:

R. violacea is the cause of violet root rot in asparagus and also a constituent of a fungal complex with F. oxysporum f.sp. asparagi and F. proliferatum. This fungal complex is causing plant decline in the field, especially in rust susceptible varieties (Fiume & Fiume 2003). Dipping and systemic fungicides can be used for field control. The fungus can survive in the soil for at least two years and the severity of disease on third-year and older asparagus plants is very dependent on soil properties and fertilization. Survival of the fungus in the soil also depends on microbial activity (Molot et al., 1975). The fungus also affects other host crops such as sugar beet, carrots and some weeds and can survive by sclerotia in soil for many years.
Asparagus crowns can be infected by the fungus and hence are a pathway. If other inoculum sources are controlled and the plants grown in clean soil under enclosed conditions, plants for planting can be a significant pathway. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

No specific references to yield losses could be found, but it is given as one of the main plant diseases of asparagus in Slovenia (Celar & Valič 2002). In Germany, this pest is of minor economic importance (pers. information of consultants of grower associations).
What is the likely economic impact of the pest irrespective of its infestation source in the absence of phytosanitary measures? (= official measures)

Medium
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:

The SEWG concluded that H. brebissonii is rare but can have an important impact and is therefore included in some certification schemes. **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 data. Limited evidence of unacceptable economic impact is available. However experts considered that the pest can have important impacts. Measures would be taken alongside Fusarium (limited extra cost). **8 - Tolerance level:**
Is there a need to change the Tolerance level:

Yes
Proposed Tolerance levels:

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

Yes
Proposed Risk management measure:

(A) (a) The crop has been inspected at an appropriate time during the growing season, a representative sample of the plants have been uprooted and no symptoms of Helicobasidium brebissonii have been observed;
or
(b) The crop has been inspected at least twice at appropriate times during the growing season and plants showing symptoms of Helicobasidium brebissonii have been rogued out immediately with no symptoms seen at a final inspection of the growing crop;
AND
(B) The crowns have been inspected before marketing and no symptoms of Helicobasidium brebissonii have been seen. **REFERENCES:**

* Celar F & Valič N (2002) Diseases of asparagus. Sodobno Kmetijstvo 35, 225-227;
* Fiume F & Fiume G (2003) Field response of some asparagus varieties to rust, Fusarium crown root rot, and violet root rot. Communications in Agricultural and Applied Biological Sciences 68, 659-671;
* Molot P M, Simone J & Leroux J P (1975) Influence of the soil microflora on the development of Rhizoctonia violacea Tul. Annales de Phytopathologie 7, 27-36;

HOST PLANT N°2: Solanum tuberosum (SOLTU) for the Seed potato sector.

Origin of the listing:

5 - Seed potato sector: Council Directive 2002/56/EC
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:

Qualified

Justification (if necessary):

Pest already listed in the EPPO PM 4 Standard under the dry/wet rot symptoms. Rhizoctonia crocorum (violet root rot) is characterized by well-known symptoms: red or violet spots due to the mycelium. However it can evolve in dry rot. As a consequence experts agreed to list this pest at the species level. **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:

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

No
Proposed Risk management measure:

 **REFERENCES:**