NAME OF THE ORGANISM: Helminthosporium solani (Silver scurf) (HELMSO)

GENERAL INFORMATION ON THE PEST

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

Silver scurf
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: 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
Conclusion:

candidate
Justification (if necessary):

It is likely that the silver scurf occurs worldwide (Compendium of potato diseases, 2001)

HOST PLANT N°1: 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?**

No
Conclusion:

Evaluation continues

Justification (if necessary):

In EPPO PM 4/28 Standard, for nuclear stock, no microplant may show any symptom of fungal, bacterial or viral diseases. For propagation stock I, in the case of minituber production, all plants and tubers must be free from pests and from any symptoms of attack by pests. **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:

It is demonstrated that Silver scurf incidence and severity increased on seed and progeny tubers from successive generations of potato seed (Geary & Johnson, 2006). H. Solani is considered a seed-borne pathogen of potato. The pathogen overwinters in soil. As potato is the only known host, it likely survives in soil as a saprophyte. It has been demonstrated that daughter tubers can become infected by soil-borne inoculum. The disease can continue to spread in commercial storage areas (Compendium of Potato Diseases, 2001). At sites where potatoes are rotated (waiting at least 3 years between potato crops) and where volunteers are controlled, plants for planting is considered to be the main pathway for H. solani (Hamm et al., 2013). **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

The disease is of greatest importance in temperate production areas where potato tubers are stored for extended periods (Compendium of Potato Diseases, 2001). Silver scurf produces a surface blemish on tubers, causing them to look “dirty.” Shoppers are less likely to purchase potatoes with Silver Scurf on it. Some tubers initially become infected in the field, but the greatest damage occurs in storage. H. solani does not cause yield reduction, but culling of tubers with unsightly surface infections and increased inspection and sorting requirements for damaged potato lots can cause substantial economic losses (Hamm et al., 2013). In the replies to the RNQP questionnaire, ES considered that "big economic losses" were related to this pest at national level. It is also mentioned that commercial disputes linked to this pest are frequent (Syngenta, 2017). Potato people from across the United States described the blemish diseases of potato as the most pressing problems , with silver scurf ranking among the highest (Nolte, 2012).
What is the likely economic impact of the pest irrespective of its infestation source in the absence of phytosanitary measures? (= official measures)

Major
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:

Impacts are considered as unacceptable on potatoes for fresh consumption and generally results in the downgrading of potatoes initially destined for the consumer market. **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:

candidate
Justification:

Unclear: Measures are problematic because of the possibility for the fungus to develop in store, so that a seed stock which is within tolerance by visual examination on delivery may not be within tolerance some weeks later. Measures in the context of a certification scheme should be considered further. **7- Is the quality of the data sufficient to recommend the pest to be listed as a RNQP?**

No

Conclusion:

Candidate by default
Justification:

The pathogen meets the criteria for an RNQP status in other respects but there is a question about the availability of effective risk management measures. **CONCLUSION ON THE STATUS:**

Recommended for listing as an RNQP, by default: The pathogen meets the criteria for an RNQP status in other respects but there is a question about the availability of effective risk management measures. **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:**

* Compendium of Potato Diseases (2001) Second edition. The American Phytopathological Society;
* Geary B & Johnson DA (2006) Relationship between silver scurf levels on seed and progeny tubers from successive generations of potato seed. American Journal of Potato Research 83, 447-453;
* Nolte P (2012) Silver Scurf of Potato. Blemish diseases more important than ever. Potato grower. available at: <http://www.potatogrower.com/2012/02/silver-scurf-of-potato>;
* Syngenta (2017) <https://www.syngenta.fr/traitements/gale-argentee>;
* Hamm PB, Johnson DA, Miller JS, Olsen NL & Nolte P (2013) Silver Scurf Management in Potatoes. A Pacific Northwest Extension Publication. Oregon State University. University of Idaho. Washington State University PNW596. available at: <http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/38206/pnw596.pdf>;