NAME OF THE ORGANISM: Sclerotinia sclerotiorum (SCLESC)

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: Oil and fibre plants sector, Seed potato sector, Vegetable propagating and planting material (other than seeds) sector

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

Not relevant
Conclusion:

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

**2 – Status in the EU:**

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

Presence in the EU:

Conclusion:

HOST PLANT N°1: Apium graveolens (APUGV) for the Vegetable propagating and planting material (other than seeds) sector.

**CONCLUSION ON THE STATUS:**

Not evaluated: This pest/host combination was not identified by any EU MS in the RNQP Questionnaire as requiring a revision of current thresholds and or a revision of current management measures. This pest/host combination was not identified by the experts of the vegetable SEWG as being a candidate for the RNQP Status with specific tolerance levels and/or specific risk management measures. Experts recommended that this pest/host combination should be covered in the future by the 'substantially free from' requirement that will remain in the Vegetable propagating and planting (excluding seeds) EU Marketing Directives.

HOST PLANT N°2: Brassica napus (BRSNN) for the Oil and fibre plants sector.

Origin of the listing:

3 - Oil and fibre plants sector: Council Directive 2002/57/EC
Plants for planting:

Seeds **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:

The white mould or Sclerotinia stem rot (SSR) disease, caused by Sclerotinia sclerotiorum, is one of the most important worldwide diseases in the oil crop Brassica napus. The pathogen overwinters as sclerotia in the soil or debris, which germinate and release ascospores which then infect the crop. They are weak pathogens and do not usually infect healthy plant tissue but invade through dead or injured tissue, or spent flower blossoms. Thus sclerotia infection of seed means they can be sown adjacent to seed and then have the potential to germinate within the susceptible crop. It has a wide host range and is widespread in the environment in weeds and other crops, and is controlled by crop rotation, isolation from other susceptible crops, fungicides and reduction of moisture and poor air circulation where possible.
Research has shown high numbers of ascospores in the air, e.g, 2007 had a severe SSR epidemic in England and high numbers of airborne ascospores were trapped at Rothamsted; while both 2003 and 2004 had a very low incidence of SSR in England and low numbers of airborne ascospores. The severe SSR season of 2007 occurred throughout a large part of Northern Europe and was not predicted in the UK by climate-based disease-forecasts (Atkins et al., 2008).
Seed samples have been found to contain up to 432 sclerotia per kilogram of the seed and sclerotia are reported to remain viable and virulent up to 7 years assuring pathogen availability when a host crop is planted.
Survival of the pathogen is also possible through infected seeds in the form of mycelial infection of the testa (Sharma et al., 2015).
The SEWG concluded that the relative significance of seed as a pathway depends on the level of inoculum already present in the soil, which is likely to vary across the EU depending on cropping history, practice of rotation etc. For some areas it is likely that seed could be a significant pathway of introduction to fields and places of production which are otherwise substantially free from the pathogen. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

Frequent occurrences of the disease in mild to severe form have been reported from Denmark, Finland, France, Germany, Sweden and United Kingdom (Sharma et al., 2015). Yield losses in susceptible crops vary and may be as high as 100 per cent. The shattering of prematurely-ripened seed pods before harvest, and loss of quality in the form of smaller, shrunken and chaffy seeds has been observed. Reported yield loss estimates due to Sclerotinia rot (SR) in rapeseed varied from very heavy in Germany. In central and eastern parts of Finland, losses by SR were so great that the cultivation of rapeseed is considered beneficial only in the southern and western areas (Sharma et al., 2015).
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:

Economic impact is considered major, subject to variation between the years. **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. The relative significance of seed as a pathway depends on the level of inoculum already present in the soil, which is likely to vary across the EU depending on cropping history, practice of rotation etc. For some areas it is likely that seed could be a significant pathway of introduction to fields and places of production which are otherwise free from the pathogen. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

No
Proposed Tolerance levels:

Basic and certified material:
Not more than 10 sclerotia or fragments of sclerotia found in a laboratory examination of a representative sample of each seed lot, of a size specified in column 4 of annex II of the Directive.
The SEWG had no evidence available to justify the different thresholds between B. napus and B. rapa. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

No
Proposed Risk management measure:

Justification (if necessary):

The SEWG noted that some member states currently have additional requirements for thresholds for this pathogen in field inspection. **REFERENCES:**

* Atkins SL, Atkins SD, Latunde-Dada AO, Stonard JF & West JS (2013) Detection and quantification of airborne ascospores of Sclerotinia sclerotiorum by quantitative-PCR. Proceedings of the IOBC/WPRS Working Group "Integrated Control in Oilseed Crops", Paris, France, 29 September-01 October 2008 (Eds Koopmann B, Cook S, Evans N & Ulber B) IOBC/WPRS Bulletin 92, 173-178;
* CABI (2005) Distribution Maps of Plant Diseases, 2005, October (Edition 1), pp Map 971 <http://www.cabi.org/isc/abstract/20066500971>;
* Sharma P, Meena PD, Verma PR, Saharan GS, Naresh Mehta N, Singh D & Kumar A (2015) Sclerotinia sclerotiorum (Lib) de Bary causing Sclerotinia rot in oilseed Brassicas: a review. Journal of Oilseed Brassica 6, Special Issue 1-44 ;

HOST PLANT N°3: Brassica rapa (BRSRR) for the Oil and fibre plants sector.

Origin of the listing:

3 - Oil and fibre plants sector: Council Directive 2002/57/EC
Plants for planting:

Seeds **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:

The white mould or Sclerotinia stem rot (SSR) disease, caused by Sclerotinia sclerotiorum, is one of the most important worldwide diseases in the oil crop Brassica rapa. The pathogen overwinters as sclerotia in the soil or debris, which germinate and release ascospores which then infect the crop. They are weak pathogens and do not usually infect healthy plant tissue but invade through dead or injured tissue, or spent flower blossoms. Thus sclerotia infection of seed means they can be sown adjacent to seed and then have the potential to germinate within the susceptible crop. It has a wide host range and is widespread in the environment in weeds and other crops, and is controlled by crop rotation, isolation from other susceptible crops, fungicides and reduction of moisture and poor air circulation where possible.
Research has shown high numbers of ascospores in the air, e.g, 2007 had a severe SSR epidemic in England and high numbers of airborne ascospores were trapped at Rothamsted; while both 2003 and 2004 had a very low incidence of SSR in England and low numbers of airborne ascospores. The severe SSR season of 2007 occurred throughout a large part of Northern Europe and was not predicted in the UK by climate-based disease-forecasts (Atkins et al., 2008).
Seed samples have been found to contain up to 432 sclerotia per kilogram of the seed and sclerotia are reported to remain viable and virulent up to 7 years assuring pathogen availability when a host crop is planted.
Survival of the pathogen is also possible through infected seeds in the form of mycelial infection of the testa (Sharma et al., 2015).
The SEWG concluded that the relative significance of seed as a pathway depends on the level of inoculum already present in the soil, which is likely to vary across the EU depending on cropping history, practice of rotation etc. For some areas it is likely that seed could be a significant pathway of introduction to fields and places of production which are otherwise substantially free from the pathogen. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

Frequent occurrences of the disease in mild to severe form have been reported from Denmark, Finland, France, Germany, Sweden and United Kingdom (Sharma et al., 2015). Yield losses in susceptible crops vary and may be as high as 100 per cent. The shattering of prematurely-ripened seed pods before harvest, and loss of quality in the form of smaller, shrunken and chaffy seeds has been observed. Reported yield loss estimates due to Sclerotinia rot (SR) in rapeseed varied from very heavy in Germany. In central and eastern parts of Finland, losses by SR were so great that the cultivation of rapeseed is considered beneficial only in the southern and western areas (Sharma et al., 2015).
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:

Economic impact is considered major, subject to variation between the years. **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. The relative significance of seed as a pathway depends on the level of inoculum already present in the soil, which is likely to vary across the EU depending on cropping history, practice of rotation etc. For some areas it is likely that seed could be a significant pathway of introduction to fields and places of production which are otherwise free from the pathogen. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

No
Proposed Tolerance levels:

Basic and certified material:
Not more than 5 sclerotia or fragments of sclerotia found in a laboratory examination of a representative sample of each seed lot, of a size specified in column 4 of annex II of the Directive.
The SEWG had no evidence available to justify the different thresholds between B. napus and B. rapa. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

No
Proposed Risk management measure:

Justification (if necessary):

The SEWG noted that some member states currently have additional requirements for thresholds for this pathogen in field inspection. **REFERENCES:**

* Atkins SL, Atkins SD, Latunde-Dada AO, Stonard JF & West, JS (2013) Detection and quantification of airborne ascospores of Sclerotinia sclerotiorum by quantitative-PCR. Proceedings of the IOBC/WPRS Working Group "Integrated Control in Oilseed Crops", Paris, France, 29 September-01 October 2008 (Eds Koopmann B, Cook S, Evans N & Ulber B) IOBC/WPRS Bulletin 92, 173-178;
* CABI (2005) Distribution Maps of Plant Diseases, 2005, October (Edition 1), pp Map 971 <http://www.cabi.org/isc/abstract/20066500971>;
* Sharma P, Meena PD, Verma PR, Saharan GS, Naresh Mehta N, Singh D & Kumar A (2015) Sclerotinia sclerotiorum (Lib) de Bary causing Sclerotinia rot in oilseed Brassicas: a review. Journal of Oilseed Brassica 6, Special Issue 1-44;

HOST PLANT N°4: Cichorium intybus (CICIN) for the Vegetable propagating and planting material (other than seeds) sector.

**CONCLUSION ON THE STATUS:**

Not evaluated: This pest/host combination was not identified by any EU MS in the RNQP Questionnaire as requiring a revision of current thresholds and or a revision of current management measures. This pest/host combination was not identified by the experts of the vegetable SEWG as being a candidate for the RNQP Status with specific tolerance levels and/or specific risk management measures. Experts recommended that this pest/host combination should be covered in the future by the 'substantially free from' requirement that will remain in the Vegetable propagating and planting (excluding seeds) EU Marketing Directives.

HOST PLANT N°5: Cynara cardunculus (CYUCA) for the Vegetable propagating and planting material (other than seeds) sector.

**CONCLUSION ON THE STATUS:**

Not evaluated: This pest/host combination was not identified by any EU MS in the RNQP Questionnaire as requiring a revision of current thresholds and or a revision of current management measures. This pest/host combination was not identified by the experts of the vegetable SEWG as being a candidate for the RNQP Status with specific tolerance levels and/or specific risk management measures. Experts recommended that this pest/host combination should be covered in the future by the 'substantially free from' requirement that will remain in the Vegetable propagating and planting (excluding seeds) EU Marketing Directives.

HOST PLANT N°6: Cynara scolymus (CYUSC) for the Vegetable propagating and planting material (other than seeds) sector.

**CONCLUSION ON THE STATUS:**

Not evaluated: This pest/host combination was not identified by any EU MS in the RNQP Questionnaire as requiring a revision of current thresholds and or a revision of current management measures. This pest/host combination was not identified by the experts of the vegetable SEWG as being a candidate for the RNQP Status with specific tolerance levels and/or specific risk management measures. Experts recommended that this pest/host combination should be covered in the future by the 'substantially free from' requirement that will remain in the Vegetable propagating and planting (excluding seeds) EU Marketing Directives.

HOST PLANT N°7: Helianthus annuus (HELAN) for the Oil and fibre plants sector.

Origin of the listing:

3 - Oil and fibre plants sector: Council Directive 2002/57/EC
Plants for planting:

Seeds **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:

Sclerotinia head rot or stem rot, caused by Sclerotinia sclerotiorum, is a significant disease of sunflower (Helianthus annuus L.) production in most of the world. Resistance is available in some varieties but no line or hybrid is immune to it. It attacks a wide range of field crops, including soybeans, field beans, oilseed rape and lupin as well as various vegetable crops. The pathogen can survive or overwinter as sclerotia in the soil or in field debris etc. and may survive for up to four years in the soil. In summer, when sunflower roots come in contact with the sclerotia, the sclerotia germinates and infects the roots and then grows into the taproot and forms a canker at the stem base. This infection prevents the plant from taking up water and nutrients. Adjacent plants may be infected by root-to-root contact with infected plants. If the overwintering sclerotia come to the surface via cultivation etc, or survival on other hosts nearby, then these can produce wind borne ascospores so infecting wider areas and casing a head rot. Management is by long rotation, deep burial, control of alternate hosts or use of resistant varieties (Flett B ARC-Grain crops Institute SA, 2012).
Sowing of seed contaminated with sclerotia will therefore also be a risk and there are tolerances for this in 2002/57/EC. In addition, seed can also be infected and transmitted to seedlings, so causing damping-off (Venturoso et al., 2015).
The SEWG concluded that the relative significance of seed as a pathway depends on the level of inoculum already present in the soil, which is likely to vary across the EU depending on cropping history, practice of rotation etc. For some areas it is likely that seed could be a significant pathway of introduction to fields and places of production which are otherwise substantially free from the pathogen. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

Sclerotinia Head Rot (SHR) is one of the most damaging diseases of sunflower in Europe, Argentina, and USA, causing average yield reductions of 10 to 20%, but leading to total production loss under favorable environmental conditions for the pathogen (Fusari et al 2012). In Egypt, Sclerotinia wilt and head rot were found distributed through the entire surveyed sunflower production areas and average incidence of wilt was 6.7% and 9.9%, while head rot incidence was 1.3 and 1.9% in 1996 and 1997, respectively (El-Deeb et al., 2000). The inoculum density ranged from 0.04 to 0.15 sclerotia per kg soil, while wilt incidence ranged from 8.7 to 15.0% respectively, so showing a positive correlation between wilt incidence and inoculum density. Both diseases, Sclerotinia wilt and head rot, caused significant reduction in weight of 1000 seeds, seed yield per head and oil content, and head rot caused higher yield loss than wilt. In Croatia Sclerotinia sclerotiorum was the most dominant pathogen on sunflower stems in 2001 with percentage of infection of non-treated and fungicide-treated plants between 0 and 32.5%, and 0 and 17.5%, respectively (Ćosić et al., 2005).
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:

Economic impact is considered major, subject to variation between the years. **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. The relative significance of seed as a pathway depends on the level of inoculum already present in the soil, which is likely to vary across the EU depending on cropping history, practice of rotation etc. For some areas it is likely that seed could be a significant pathway of introduction to fields and places of production which are otherwise free from the pathogen. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

No
Proposed Tolerance levels:

Basic and certified material:
Not more than 10 sclerotia or fragments of sclerotia found in a laboratory examination of a representative sample of each seed lot, of a size specified in column 4 of annex II of the Directive. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

No
Proposed Risk management measure:

Justification (if necessary):

The SEWG noted that some member states currently have additional requirements for thresholds for this pathogen in field inspection. **REFERENCES:**

* CABI (2005) Distribution Maps of Plant Diseases, 2005, October (Edition 1), pp Map 971 <http://www.cabi.org/isc/abstract/20066500971>;
* Ćosić J, Jurković D, Vrandečić K & Duvnjak T (2005) Occurrence of diseases on sunflower stems in eastern Croatia. Agriculture Scientific and Professional Review 11 No.1, 11-16;
* El-Deeb AA, Abdallah SM, Mosa AA, Ibrahim MM (2000) Sclerotinia diseases of sunflower in Egypt. Arab Universities Journal of Agricultural Sciences 8 No.3, 779-798;
* Flett B ARC-Grain Crops Institute SA (2012), <http://www.grainsa.co.za/sclerotinia-head-rot-of-sunflower-in-the-spotlight-2>
* Fusari CM, Rienzo JA di, Troglia C, Nishinakamasu V, Moreno MV, Maringolo C, Quiroz F, Alvarez D, Escande A, Hopp E, Heinz RA, Lia VV & Paniego NB (2012) BMC Plant Biology 12 No.93 pp;
* Venturoso L dos R, Bacchi LMA, Gavassoni WL, Venturoso LAC, Pontim BCA & Reis GF dos (2015) Ciência Rural 45 No.5 788-793. <https://www.cabdirect.org/cabdirect/abstract/20153195553>;

HOST PLANT N°8: Sinapis alba (SINAL) for the Oil and fibre plants sector.

Origin of the listing:

3 - Oil and fibre plants sector: Council Directive 2002/57/EC
Plants for planting:

Seeds **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:

The white mould or Sclerotinia stem rot (SSR) disease, caused by Sclerotinia sclerotiorum, is an important worldwide diseases in the white mustard crop Sinapis alba, though it is less severe than some other brassica species. The pathogen overwinters as sclerotia in the soil or debris, which germinate and release ascospores which then infect the crop. They are weak pathogens and do not usually infect healthy plant tissue but invade through dead or injured tissue, or spent flower blossoms. Thus sclerotia contamination of seed means they can be sown adjacent to seed and then have the potential to germinate within the susceptible crop. It has a wide host range and is widespread in the environment in weeds and other crops, and is controlled by crop rotation, isolation from other susceptible crops, fungicides and reduction of moisture and and poor air circulation where possible.
Research has shown high numbers of ascospores in the air, e.g, 2007 had a severe SSR epidemic in England and high numbers of airborne ascospores were trapped at Rothamsted; while both 2003 and 2004 had a very low incidence of SSR in England and low numbers of airborne ascospores. The severe SSR season of 2007 occurred throughout a large part of Northern Europe and was not predicted in the UK by climate-based disease-forecasts (Atkins et al., 2008).
Seed samples have been found to contain up to 432 sclerotia per kilogram of the seed and sclerotia are reported to remain viable and virulent up to 7 years assuring pathogen availability when a host crop is planted.
Survival of the pathogen is also possible through infected seeds in the form of mycelial infection of the testa (Sharma et al., 2015).
The SEWG concluded that the relative significance of seed as a pathway depends on the level of inoculum already present in the soil, which is likely to vary across the EU depending on cropping history, practice of rotation etc. For some areas it is likely that seed could be a significant pathway of introduction to fields and places of production which are otherwise substantially free from the pathogen. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

Frequent occurrences of the disease in mild to severe form have been reported from Denmark, Finland, France, Germany, Sweden and United Kingdom (Sharma et al., 2015) although no details are specific to Sinapis alba. However it is remarked moderate Sclerotinia resistance has been reported in this species. Yield losses in susceptible crops vary and may be as high as 100 per cent. The shattering of prematurely-ripened seed pods before harvest, and loss of quality in the form of smaller, shrunken and chaffy seeds has been observed. Reported yield loss estimates due to Sclerotinia rot (SR) in rapeseed varied from very heavy in Germany. In central and eastern parts of Finland, losses by SR were so great that the cultivation of rapeseed is considered beneficial only in the southern and western areas (Sharma et al., 2015).
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:

Economic impact is considered major, subject to variation between the years. **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. The relative significance of seed as a pathway depends on the level of inoculum already present in the soil, which is likely to vary across the EU depending on cropping history, practice of rotation etc. For some areas it is likely that seed could be a significant pathway of introduction to fields and places of production which are otherwise free from the pathogen. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

No
Proposed Tolerance levels:

Basic and certified material:
Not more than 5 sclerotia or fragments of sclerotia found in a laboratory examination of a representative sample of each seed lot, of a size specified in column 4 of annex II of the Directive. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

No
Proposed Risk management measure:

Justification (if necessary):

The SEWG noted that some member states currently have additional requirements for thresholds for this pathogen in field inspection. **REFERENCES:**

* Atkins SL, Atkins SD, Latunde-Dada AO, Stonard JF & West, JS (2013) Detection and quantification of airborne ascospores of Sclerotinia sclerotiorum by quantitative-PCR. Proceedings of the IOBC/WPRS Working Group "Integrated Control in Oilseed Crops", Paris, France, 29 September-01 October 2008 (Eds Koopmann B, Cook S, Evans N & Ulber B) IOBC/WPRS Bulletin 92, 173-178;
* CABI (2005) Distribution Maps of Plant Diseases, 2005, October (Edition 1), pp Map 971 <http://www.cabi.org/isc/abstract/20066500971>;
* Sharma P, Meena PD, Verma PR, Saharan GS, Naresh Mehta N, Singh D & Kumar A (2015) Sclerotinia sclerotiorum (Lib) de Bary causing Sclerotinia rot in oilseed Brassicas: a review. Journal of Oilseed Brassica 6, Special Issue 1-44 ;

HOST PLANT N°9: Solanum lycopersicum (LYPES) for the Vegetable propagating and planting material (other than seeds) sector.

**CONCLUSION ON THE STATUS:**

Not evaluated: This pest/host combination was not identified by any EU MS in the RNQP Questionnaire as requiring a revision of current thresholds and or a revision of current management measures. This pest/host combination was not identified by the experts of the vegetable SEWG as being a candidate for the RNQP Status with specific tolerance levels and/or specific risk management measures. Experts recommended that this pest/host combination should be covered in the future by the 'substantially free from' requirement that will remain in the Vegetable propagating and planting (excluding seeds) EU Marketing Directives.

HOST PLANT N°10: Solanum melongena (SOLME) for the Vegetable propagating and planting material (other than seeds) sector.

**CONCLUSION ON THE STATUS:**

Not evaluated: This pest/host combination was not identified by any EU MS in the RNQP Questionnaire as requiring a revision of current thresholds and or a revision of current management measures. This pest/host combination was not identified by the experts of the vegetable SEWG as being a candidate for the RNQP Status with specific tolerance levels and/or specific risk management measures. Experts recommended that this pest/host combination should be covered in the future by the 'substantially free from' requirement that will remain in the Vegetable propagating and planting (excluding seeds) EU Marketing Directives.

HOST PLANT N°11: 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. Within the Sclerotinia Genus, experts considered that only two species are important pests. 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:**

* UNECE (2014) UNECE Standard S-1 concerning the marketing and commercial quality control of Seed Potatoes. UNECE Guide to Seed Potato Diseases, Pests and Defects. Available at <http://www.unece.org/tradewelcome/steering-committee-on-trade-capacity-and-standards/tradeagr/brochures-and-publications/potato-diseases-and-pests.html>;