NAME OF THE ORGANISM: Stromatinia cepivora (Sclerotium cepivorum) (SCLOCE)

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

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

**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 (1990); Bulgaria (1993); Cyprus (1990); Czech Republic (2011); Denmark (1993); Finland (2011); France (1990); Germany (1993); Greece (1990); Ireland (1990); Italy (1990); Netherlands (1990); Portugal (1994); Portugal/Azores (1994); Romania (1990); Spain (1990); Sweden (1992); United Kingdom (1993); United Kingdom/England (1994); United Kingdom/Northern Ireland (1994)
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/>).

HOST PLANT N°1: Allium cepa (ALLCE) 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:

White rot is one of the most important, widespread and destructive diseases of Allium cepa. High levels of soil infestations cause plants to die in many areas of the field and release high numbers of sclerotia which can survive for many years in the soil or associated debris (Compendium of Onion and Garlic Diseases, 2008). Seed is not known to be infected, so planting material grown from seed if produced in secure protected conditions would not be a pathway, however onion sets could be potentially infected during their production. High levels of soil infestations cause plants to die in many areas of the field and release high numbers of sclerotia which can survive for many years in the soil or associated debris. Surveys show residual population exist for 10-15 years and even after 40 years can elicit 1-5% plant loss (Compendium of Onion and Garlic Diseases, 2008). For these reasons it is suggested than once S. cepivorum is established in a field, onion sets, though a pathway are not likely to be the main pathway, because infection can arise from soil and debris borne sclerotia for many years and these are almost impossible to eradicate. However experts concluded that, even in areas where S. cepivorum is already established, a lot of fields are free from the pathogen. In those cases, infected plants for planting (sets, cloves ...) may constitute a high risk pathway. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

White rot is one of the most important, widespread and destructive diseases of Allium spp and under suitable conditions becomes a major limiting factor for continued commercial production of Allium spp. (Compendium of Onion and Garlic Diseases, 2008).
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:

 **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 and practical experience. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

Yes
Proposed Tolerance levels:

Zero tolerance approach, based on the following risk management measures. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

Yes
Proposed Risk management measure:

(A) The plants are module raised transplants grown in medium free from Stromatinia cepivora;
OR
(B) (a) (aa) The crop has been inspected at an appropriate time during the growing season and no symptoms of Stromatinia cepivora have been observed; or
(bb) The crop has been inspected at an appropriate time during the growing season and plants showing symptoms of Stromatinia cepivora have been rogued out immediately with no symptoms seen at an additional final inspection of the growing crop;
and
(b) The plants or sets have been inspected before marketing and no symptoms of Stromatinia cepivora have been seen.
Justification (if necessary):

Symptoms appear on the upper side of the crop (plants are dying). Symptoms are very clear (presence of sclerotia). Therefore testing should not be mandatory. Young plants (transplant production) should be grown from seeds in pest free medium. The producer should keep records of the visual examination performed. This should be done under the supervision of the competent authority. **REFERENCES:**

* Compendium of Onion and Garlic Diseases (2008) Second edition. The American Phytopathological Society;

HOST PLANT N°2: Allium cepa Aggregatum types (Allium ascalonicum) (ALLAS) 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:

White rot is a damaging diseases of Allium ascalonium, shallots, where roots may be rotted with embedded sclerotia and cause rotting in storage if conditions are suitable. High levels of soil infestations may kill the plants in many areas of the field and release high numbers of sclerotia which can survive for many years in the soil or associated debris. Surveys show residual population exist for 10-15 years and even after 40 years can elicit 1-5% plant loss (Compendium of Onion and Garlic Diseases, 2008). For these reasons it is suggested that once S. cepivorum is established in a field, shallot bulbs, though a pathway, are not likely to be the main pathway, because infection can arise from soil and debris-borne sclerotia for many years. However experts concluded that, even in areas where S. cepivorum is already established, a lot of fields are free from the pathogen. In those cases, infected plants for planting (sets, cloves ...) may constitute a high risk pathway. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

Experts considered that the economic impact could be extrapolated from onion (A. cepa). This is reinforced by the fact that shallot is produced by vegetative multiplication. Experts confirmed that this crop is also impacted by Stromatinia cepivora.
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:

 **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 and practical experience. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

Yes
Proposed Tolerance levels:

Zero tolerance approach, based on the following risk management measures. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

Yes
Proposed Risk management measure:

(A) The plants are module raised transplants grown in medium free from Stromatinia cepivora;
OR
(B) (a) (aa) The crop has been inspected at an appropriate time during the growing season and no symptoms of Stromatinia cepivora have been observed; or
(bb) The crop has been inspected at an appropriate time during the growing season and plants showing symptoms of Stromatinia cepivora have been rogued out immediately with no symptoms seen at an additional final inspection of the growing crop;
and
(b) The plants or sets have been inspected before marketing and no symptoms of Stromatinia cepivora have been seen.
Justification (if necessary):

Experts commented that they do not have examples of use of transplants for shallots, but decided to keep this solution just in case. **REFERENCES:**

* Compendium of Onion and Garlic Diseases (2008) Second edition. The American Phytopathological Society;

HOST PLANT N°3: Allium fistulosum (ALLFI) 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:

White rot is one of the most important, widespread and destructive diseases of Allium crops though appears to be less significant in A. fistulosum. High levels of soil infestations cause plants to die in many areas of the field and release high numbers of sclerotia which can survive for many years in the soil or associated debris. (Compendium of Onion and Garlic Diseases, 2008). Seed is not known to be infected, so planting material grown from seed if produced in secure protected conditions would not be a pathway, however once S. cepivorum is established in a field, A fistulosum plants or bulbs, though a pathway are not likely to be the main pathway, because infection can arise from soil and debris borne sclerotia for many years. However experts concluded that, even in areas where S. cepivorum is already established, a lot of fields are free from the pathogen. In those cases, infected plants for planting (sets, cloves ...) may constitute a high risk pathway. Experts confirmed that plants for planting are used. Plants for planting can be a significant pathway compared to others. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

White rot is one of the most important, widespread and destructive diseases of Allium spp and under suitable conditions becomes a major limiting factor for continued commercial production of Allium spp. (Compendium of Onion and Garlic Diseases, 2008). In German conditions, medium impact is observed.
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:

 **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 and practical experience. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

Yes
Proposed Tolerance levels:

Zero tolerance approach, based on the following risk management measures. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

Yes
Proposed Risk management measure:

(A) The plants are module raised transplants grown in medium free from Stromatinia cepivora;
OR
(B) (a) (aa) The crop has been inspected at an appropriate time during the growing season and no symptoms of Stromatinia cepivora have been observed; or
(bb) The crop has been inspected at an appropriate time during the growing season and plants showing symptoms of Stromatinia cepivora have been rogued out immediately with no symptoms seen at an additional final inspection of the growing crop;
and
(b) The plants or sets have been inspected before marketing and no symptoms of Stromatinia cepivora have been seen.
Justification (if necessary):

Transplants of A. fistulosum exist for gardeners. **REFERENCES:**

* Compendium of Onion and Garlic Diseases (2008) Second edition. The American Phytopathological Society;

HOST PLANT N°4: Allium porrum (ALLPO) 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:

White rot is one of the most important, widespread and destructive diseases of Allium porrum, leek. High levels of soil infestations cause plants to die in many areas of the field and release high numbers of sclerotia which can survive for many years in the soil or associated debris (Compendium of Onion and Garlic Diseases, 2008). Seed is not known to be infected, so planting material grown from seed if produced in secure protected conditions would not be a pathway. High levels of soil infestations cause plants to die in many areas of the field and release high numbers of sclerotia which can survive for many years in the soil or associated debris. Surveys show residual population exist for 10-15 years and even after 40 years can elicit 1-5% plant loss (Compendium of Onion and Garlic Diseases, 2008). For these reasons it is suggested than once S. cepivorum is established in a field, leek plants, are not likely to be the main pathway, because infection can arise from soil and debris borne sclerotia for many years and these are almost impossible to eradicate. However experts concluded that, even in areas where S. cepivorum is already established, a lot of fields are free from the pathogen. In those cases, infected plants for planting (e.g. transplants grown in a field) may constitute a high risk pathway, especially for other Allium crops, that are more vulnerable. Module-raised leek transplants (in paper pots or in peat pots) are not likely to be a main pathway. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

?
Justification:

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:

Experts concluded that the pest could have an unacceptable indirect economic impact on other Allium species. **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 possible indirect economic impacts on other Allium species. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

Yes
Proposed Tolerance levels:

Zero tolerance approach, based on the following risk management measures. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

Yes
Proposed Risk management measure:

(A) The plants are module raised transplants grown in medium free from Stromatinia cepivora;
OR
(B) (a) (aa) The crop has been inspected at an appropriate time during the growing season and no symptoms of Stromatinia cepivora have been observed; or
(bb) The crop has been inspected at an appropriate time during the growing season and plants showing symptoms of Stromatinia cepivora have been rogued out immediately with no symptoms seen at an additional final inspection of the growing crop;
and
(b) The plants or sets have been inspected before marketing and no symptoms of Stromatinia cepivora have been seen. **REFERENCES:**

* Compendium of Onion and Garlic Diseases (2008) Second edition. The American Phytopathological Society;

HOST PLANT N°5: Allium sativum (ALLSA) 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:

White rot is a damaging diseases of Allium sativum, where roots may be rotted with embedded sclerotia and cause rotting in storage if conditions are suitable. High levels of soil infestations cause plants to die in many areas of the field and release high numbers of sclerotia which can survive for many years in the soil or associated debris. Surveys show residual population exist for 10-15 years and even after 40 years can elicit 1-5% plant loss (Compendium of Onion and Garlic Diseases, 2008). For these reasons it is suggested than once S. cepivorum is established in a field, garlic corms, though a pathway, are not likely to be the main pathway, because infection can arise from soil and debris borne sclerotia for many years. However experts concluded that, even in areas where S. cepivorum is already established, a lot of fields are free from the pathogen. In those cases, infected plants for planting (sets, cloves ...) may constitute a high risk pathway. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

White rot is one of the most important, widespread and destructive diseases of Allium spp and under suitable conditions becomes a major limiting factor for continued commercial production of Allium spp. (Compendium of Onion and Garlic Diseases, 2008). For garlic it causes rotting in storage if conditions are suitable (Compendium of Onion and Garlic Diseases, 2008). Experts also referred to experience of economic impact on garlic in the US.
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:

 **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 and practical experience. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

Yes
Proposed Tolerance levels:

Zero tolerance approach, based on the 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 and no symptoms of Stromatinia cepivora have been observed;
or
(b) The crop has been inspected at an appropriate time during the growing season and plants showing symptoms of Stromatinia cepivora have been rogued out immediately with no symptoms seen at an additional final inspection of the growing crop;
AND
(B) The plants or sets have been inspected before marketing and no symptoms of Stromatinia cepivora have been seen. **REFERENCES:**

* Compendium of Onion and Garlic Diseases (2008) Second edition. The American Phytopathological Society;