NAME OF THE ORGANISM: Botrytis cinerea (BOTRCI)

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

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

Not relevant
Conclusion:

* Candidate: Oil and fibre plants sector

Justification (if necessary):

Remark on taxonomy: According to the International Commission of the Taxonomy of Fungi, the list of plant pathogenic fungi (posted 08/25/2015) by the International Subcommission for the Taxonomy of Phytopathogenic Fungi was updated (<http://www.fungaltaxonomy.org/index.php/download_file/view/132/1/>). According to this list the appropriate name should be Botrytis cinerea. **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):

This pest is frequent, present worldwide.

HOST PLANT N°1: Cannabis sativa (CNISA) for the Oil and fibre plants sector.

Origin of the listing:

RNQP Questionnaire
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):**

?
Conclusion:

Candidate

Justification:

Botrytis spp. is listed in EU Marketing Directive 2002/57 with a threshold, however no references to other species of Botrytis were found affecting Cannabis sativa.
Botrytis cinerea (grey mould) is a worldwide, ubiquitous fungus with a wide host range of herbaceous annual and perennial plants causing a primary and secondary rot, especially after damage or conditions of high humidity. Sclerotia and conidia are formed on fallen fruit and plant debris from which wind-borne ascospores and condia are released into the air to infected new plant material of many species. Botrytis cinerea was not specifically listed as being found on hemp seed during a survey of genebank seed in Romania, though report unclear (Plăcintă & Murariu, 2016). The SEWG concluded that there was uncertainties concerning the significance of the seed pathway leading to an impact on the germination and on the crop establishment compared to pest free seed, or seed which has been treated against the pest. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

It is listed as a serious disease of hemp in NZ (McPartland, 1996) where Botrytis cinerea, togther with two other fungi, rot flowering tops and stalks of hemp (Cannabis sativa) (McPartland & Rhode 2005). During 1995-96, diseases of hemp were surveyed in Germany and Botrytis cinerea a causal agent of stem rot, occurred on some individual plants though optimal crop density and minimal N-fertilization contained the disease. Fungicidal seed dressings are recommended for the control of emerging seed-borne or soil-borne fungi (e.g. Fusarium spp. and Botrytis spp.). It was suggested that it is not necessary to apply specific plant protection products against weeds, diseases or pests of hemp, although general seed dressings are recommended (Patschke et al., 1997). Most of 11 vars. tested in Poland were severely infected though spraying reduced infection, and increased fibre yield (Krzysztalowska H. 1973).
What is the likely economic impact of the pest irrespective of its infestation source in the absence of phytosanitary measures? (= official measures)

Minor
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?

No
Conclusion:

Not candidate
Justification:

Evidence of economic impacts is not as strong as for sunflower and flax. It is not a candidate for the RNQP status on the basis of the evidence available to the SEWG. **CONCLUSION ON THE STATUS:**

Disqualified: Evidence of economic impacts is not as strong as for sunflower and flax. Not a candidate on the basis of the evidence available to the SEWG. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

No
Proposed Tolerance levels:

Not recommended for the RNQP status. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

No
Proposed Risk management measure:

Not recommended for the RNQP status. **REFERENCES:**

* Krzysztalowska H (1973) Contribution to the study on the occurrence of Botrytis cinerea (Pers./Lev.) on hemp and the possibilities of its control. Pr. Inst. Krajow. Wlok. Natur. 20, 113-124;
* McPartland JM (1996) A review of Cannabis diseases. Journal of the International Hemp Association 3, 19-23;
* McPartland JM & Rhode B (2005) New hemp diseases and pests in New Zealand. Journal of Industrial Hemp 10,99-108;
* Patschke K, Gottwald R & Müller R (1997) First results of phytopathological studies in hemp crops in Brandenburg Land. Nachrichtenblatt des Deutschen Pflanzenschutzdienstes 49, 286-290;
* Plăcintă DD & Murariu D (2016) Fungus evaluation from seeds germplasm before medium and long term storage. Cercetări Agronomice în Moldova 49,71-82;