NAME OF THE ORGANISM: Verticillium albo-atrum (VERTAA)

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: Fruits (including hops) sector

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

Not relevant
Conclusion:

* Not evaluated: Fruits (including hops) sector

Justification (if necessary):

V. albo-atrum was recently split into three species, V. albo-atrum sensu stricto (infecting mainly potato), V. alfalfae (infecting alfalfa) and V. nonalfalfae (infecting hops and other crops), for which reliable detection and identification methods exist for each one (EU COM, 2016).
Hops: As a consequence, the only listing of V. nonalfalfae is proposed as RNQP for hops.
Capsicum annuum: The study of Inderbitzin and Subbarao on the genus Verticillium sp. (2014), based on multigene phylogenetic analyses and morphological investigations of a limited number of isolates (i.e. 74 isolates), were not performed on pepper. Therefore it is not possible to state with certainty that Verticillium species from pepper are V. nonalfalfae (as those from other solanaceaous crops). For this reason the evaluation of the pest continue in referring to Verticillium albo-atrum sensu lato. **2 – Status in the EU:**

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

Presence in the EU:

Yes
List of countries (EPPO Global Database):

Austria (2014); Belgium (2015); Bulgaria (1993); Croatia (1996); Cyprus (2011); Czech Republic (2011); Denmark (1993); Estonia (1986); Finland (2011); France (1993); Germany (1993); Greece (1986); Greece/Kriti (1986); Hungary (1988); Ireland (1986); Italy (1986); Italy/Sicilia (1986); Italy/Sardegna (1986); Latvia (1986); Lithuania (1986); Luxembourg (1992); Netherlands (2015); Poland (1986); Portugal (1986); Romania (1986); Spain (1985); Sweden (1988); United Kingdom (2014); United Kingdom/England (1986); United Kingdom/Northern Ireland (1986); United Kingdom/Scotland (1986); United Kingdom/Channel Islands (1986)
Conclusion:

Justification (if necessary):

Data of the presence of this pest on the EU territory are available in EPPO Global Database (<https://gd.eppo.int/>). Based on the NPPO answers to the EFSA questionnaire and the EPPO Global Database (2014), V. albo-atrum sensu lato is reported to be present in most of the EU MSs (EFSA, 2014).
Remark: V. nonalfalfae is currently known from Canada, the USA (IL, PA), China, Cuba, Japan and Middle Asia. The distribution of V. nonalfalfae in the EU is not yet clear due to the recent re-classification, but it can be assumed that its distribution will at least reflect the Verticillium wilt disease of hops, due to V. nonalfalfae being the main causal species (V. dahliae is sometimes isolated). This species also infects a number of other widely grown hosts such as cotton, petunia, spinach, lucerne, tomato and potato (EU COM, 2016).

HOST PLANT N°1: Cydonia oblonga (CYDOB) for the Fruits (including hops) sector.

**CONCLUSION ON THE STATUS:**

Not evaluated: from the fruit Marketing Directive (see Terms of reference)