NAME OF THE ORGANISM: Ditylenchus destructor (DITYDE)

GENERAL INFORMATION ON THE PEST

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

Pest category:

Nematoda **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 seed sector

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

Not relevant
Conclusion:

* Candidate: Vegetable seed 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 (2014); Belgium (2007); Bulgaria (2001); Czech Republic (2001); Estonia (2008); France (2001); Germany (2014); Greece (2001); Hungary (1992); Ireland (1998); Latvia (1998); Luxembourg (2001); Netherlands (2015); Poland (2012); Romania (2011); Slovakia (1996); Sweden (1992); United Kingdom (2001); United Kingdom/England (2014); United Kingdom/Scotland (2014)
Conclusion:

candidate
Justification (if necessary):

The Standing Committee agreed in February 2015 to request EFSA for a complete Pest Risk Assessment before taking a decision about the future regulatory status of this pest in the EU (EU COM, 2015). This complete PRA was published in 2016 (EFSA-PLH 2016). Data of the presence of this pest on the EU territory are available in EPPO Global Database (<https://gd.eppo.int/>). The nematode is sporadically present in the majority of EU Member States (EFSA, 2014).

HOST PLANT N°1: Allium sativum (ALLSA) for the Vegetable seed 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):**

No
Conclusion:

Not candidate

Justification:

D. destructor attacks a wide range of species, including garlic which is a good host (CABI, 2016) to 'may be only slightly infested' (EFSA, 2014), and is an endoparasite of the roots and underground modified plant parts, rarely on aerial plant parts, which show few symptoms. The main means of dispersal is with infested potato tubers or other subterranean organs of host plants, for example bulbs and rhizomes which can harbour adults, eggs and juveniles. Transport in infested soil is another important means of spread and irrigation water can also carry the nematodes.
The pest overwinters in soil as adults or larvae and may multiply by feeding on alternative weed hosts and on fungal mycelia. It may possibly overwinter as eggs which hatch in the spring and larvae are immediately able to parasitize hosts. In garlic bulbs, nematodes can be controlled by drying at 34-36°C for 12-17 days or using seed dressings with thiram or benomyl at sowing, and infestation in fields can be effectively controlled by flooding. Control by crop rotation is difficult due to its wide host range (CABI, 2016; EFSA, 2014).
No references to garlic true seed being infested with D. destructor could be found and therefore seed is considered not to be a pathway for this pest/host combination. **CONCLUSION ON THE STATUS:**

Disqualified: true seeds of garlic are not considered as a significant pathway. **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:**

* CABI (Centre for Agricultural Bioscience International) (2016). Datasheets Ditylenchus destructor (potato tuber nematode). Invasive species compendium. CABI, Wallingford, UK. Available from <http://www.cabi.org/isc/datasheet/19286>;
* EFSA Panel on Plant Health (PLH) (2014) Scientific Opinion on the pest categorisation of Ditylenchus destructor Thorne. EFSA Journal 2014;12(9):3834. 31 pp. doi:10.2903/j.efsa.2014.3834;
* Fujimura T, Washio S & Nishizawa T (1986) Garlic as a new host of the potato-root nematode, Ditylenchus destructor Thorne. Japanese Journal of Nematology 16, 38-47;
* Yu Q, Zaida MA, Hughes B & Celetti M (2012) Discovery of potato rot nematode, Ditylenchus destructor, infesting garlic in Ontario, Canada. Plant Disease 96, 297;