NAME OF THE ORGANISM: Ditylenchus dipsaci (DITYDI)

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: Ornamental sector

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

Not relevant
Conclusion:

* Candidate: Ornamental sector

Justification (if necessary):

Remark for ornamentals:
- Allium: There is a large number of Allium species (and within the species, varieties) that are used as ornamentals.
Therefore it is suggested to include all Allium for ornamental use in the present evaluation.
- Ismene (host plant for D. dipsaci as mentioned in Directive 2000/29/EC) is nowadays named Hymenocallis for cultivated ornamental species and varieties. **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 (1993); Belgium (2007); Bulgaria (1993); Croatia (1996); Cyprus (1993); Czech Republic (1994); Denmark (1993); Estonia (1994); Finland (1993); France (2010); Germany (2014); Greece (1996); Hungary (2001); Ireland (1998); Italy (1992); Italy/Sicilia (2002); Latvia (2013); Lithuania (1998); Malta (1995); Netherlands (2015); Poland (2012); Portugal (1992); Portugal/Azores (1994); Romania (2011); Slovakia (2007); Slovenia (2003); Spain (2007); Sweden (1993); United Kingdom (1993); United Kingdom/England (1994); United Kingdom/Scotland (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: Muscari (1MUSG) for the Ornamental sector.

Origin of the listing:

IIA2AWG
Plants for planting:

Bulbs and corms 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:

Normally propagated by bulbs or tubers which can be infested by D. dipsaci and planting nematode-free bulbs is recognized as an important control practice for this pest. Other potential sources of infection are nematode-infested soil, infested debris and infested weeds. Field control can be by rotation, soil solarization or resistant cultivars, however chemical treatments of soil are not economic for large areas (CABI, 2015).
In conclusion young plants for transplanting or bulbs are both pathways, and with suitable control measures carried out for the alternative inoculum sources, plants and bulbs can be considered as significant pathways compared to others. **5 - Economic impact:**
Are there documented reports of any economic impact on the host?

Yes
Justification:

As a member of the Asparagaceae, [presumably] bulb symptoms are the same as in Narcissus spp., but distinct swellings are not usually seen on the plant leaves. The foliage may show pale yellow streaks, distortion and often slight swelling (IPPC, 2016). No references found in a literature search for this pest/host combination.
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:

Experts concluded that D. dipsaci is known to cause the same symptoms on Camassia, Chionodoxa, Crocus flavus, Galanthus, Galtonia candicans, Hyacinthus, Ismene, Muscari, Narcissus, Ornithogalum, Puschkinia and Scilla as in Tulipa or Allium (information from the Flower Bulb Inspection Service (BKD) and from the Netherlands Food and Consumer Product Safety Authority (NVWA, the Dutch NPPO)). **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. **8 - Tolerance level:**
Is there a need to change the Tolerance level:

No
Proposed Tolerance levels:

Zero tolerance based on visual examination. **9 - Risk management measures:**
Is there a need to change the Risk management measure:

Yes
Proposed Risk management measure:

(a) The plants have been inspected and no symptoms of Ditylenchus dipsaci have been observed on the lot since the beginning of the last complete cycle of vegetation;
or
(b) The bulbs are found substantially free from symptoms of Ditylenchus dipsaci and packed for sale to the final consumer. **REFERENCES:**

* CABI (Centre for Agricultural Bioscience International) (2015) Online. Datasheets Ditylenchus dipsaci (stem and bulb nematode). Invasive species compendium. CABI, Wallingford, UK. Available from <http://www.cabi.org/isc/datasheet/19287>;
* IPPC (2016) ISPM 27. Diagnostic protocols for regulated pests DP 8: Ditylenchus dipsaci and Ditylenchus destructor. Available at <https://www.ippc.int/static/media/files/publication/en/2016/01/DP_08_2015_En__2015-12-22_Reformatted.pdf>;